

# HM 170.55

## Electronic pressure measurement for HM 170



### Description

- display of differential pressure characteristics
- up to 17 differential pressures can be measured simultaneously

Differential pressure characteristics can be visualized in a software using HM 170.55.

HM 170.55 consists of a measuring amplifier with 18 pressure sensors. One of the sensors measures the reference pressure. Up to 17 pressure sensors are connected by hoses to an accessory in the wind tunnel HM 170. The measured values are transmitted directly to a PC via USB where they can be analysed using the software included. The software displays simultaneously the differential pressures of the pressure measuring points and the reference pressure.

HM 170.55 is recommended as an accessory for experiments on pressure distribution on aerofoils HM 170.22, HM 170.26, HM 170.27, on pressure distribution on a cylinder HM 170.23 and for experiments on wake measurement HM 170.28. Additionally, HM 170.55 is suitable as accessory for all experiments with differential pressure measurement.

The software detects automatically if the system for data acquisition HM 170.60 is also used. In this case, the software of HM 170.55 also indicates velocity and angle.

### Learning objectives/experiments

- measurement of differential pressures

### Specification

- [1] differential pressure measurement/display of differential pressure characteristics
- [2] simultaneous display of up to 17 differential pressures in a software
- [3] measuring amplifier with pressure sensors
- [4] connection of pressure measuring points and amplifier using hoses
- [5] GUNT software for data acquisition via USB under Windows 10

### Technical data

Measuring ranges

- differential pressure: 17x  $\pm 5$ mbar

230V, 50Hz, 1 phase

230V, 60Hz, 1 phase

120V, 60Hz, 1 phase

UL/CSA optional

LxWxH: 370x315x160mm (measuring amplifier)

Weight: approx. 5kg

### Required for operation

PC with Windows

### Scope of delivery

- 1 measuring amplifier
- 1 set of hoses
- 1 GUNT software + USB cable

# HM 170.55

## Electronic pressure measurement for HM 170

### Required accessories

HM 170            Open wind tunnel

### Optional accessories

HM 170.22        Pressure distribution on an aerofoil NACA 0015  
HM 170.26        Pressure distribution on an aerofoil NACA 54118  
HM 170.27        Pressure distribution on an aerofoil NACA 4415  
HM 170.23        Pressure distribution on a cylinder  
HM 170.28        Wake measurement