

HM 170.60

System for data acquisition



Description

representation of characteristics printout and storage of measured values

The data acquisition system has been developed specifically to support the analysis of experiments with the wind tunnel HM 170. HM 170.60 consists of a measuring amplifier with differential pressure sensor and A/D converter, an angle sensor and software.

The system supports experiments such as measurement of lift and drag on drag bodies, or boundary layer analysis on a plate. Therefore, depending on the experiments, two pressure measuring points, an angle sensor respectively the electronic displacement measurement HM 170.61, the inclined tube manometer from HM 170 and the two-component force sensor from HM 170 or the three-component force sensor from HM 170.40 can be connected to the measuring amplifier.

Velocity, differential pressure, angle of attack or displacement and moment, lift and drag forces are transmitted via USB directly to a PC where they can be analysed using the software.

Specification

- [1] system for data acquisition for HM 170
- [2] measuring amplifier with connections for angle sensor and electronic displacement measurement, differential pressure measurement, inclined tube manometer, two- or three-component force sensor
- [3] velocity, pressure, angle/displacement, lift/drag forces and moment evaluated on the PC
- [4] GUNT software for data acquisition via USB under Windows 7, 8.1, 10

Technical data

Measuring ranges

- velocity: 0...28m/s
- differential pressure: ±5mbar
- angle: ±180°
- ∎ travel: 0...10mm
- ∎ lift: ±4N
- drag: ±4N
- moment: ±0,5Nm

230V, 50Hz, 1 phase 230V, 60Hz, 1 phase 120V, 60Hz, 1 phase UL/CSA optional LxWxH: 360x330x160mm (measuring amplifier) Weight: approx. 8kg

Required for operation

PC with Windows

Scope of delivery

- 1 measuring amplifier
- 1 differential pressure sensor
- 1 angle sensor
- 1 set of cables
- 1 hose
- 1 GUNT software CD + USB cable
- 1 manual



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Optional accessories

070.17040	HM 170.40	Three-Component Force Sensor
070.17061	HM 170.61	Electronic Displacement Measurement