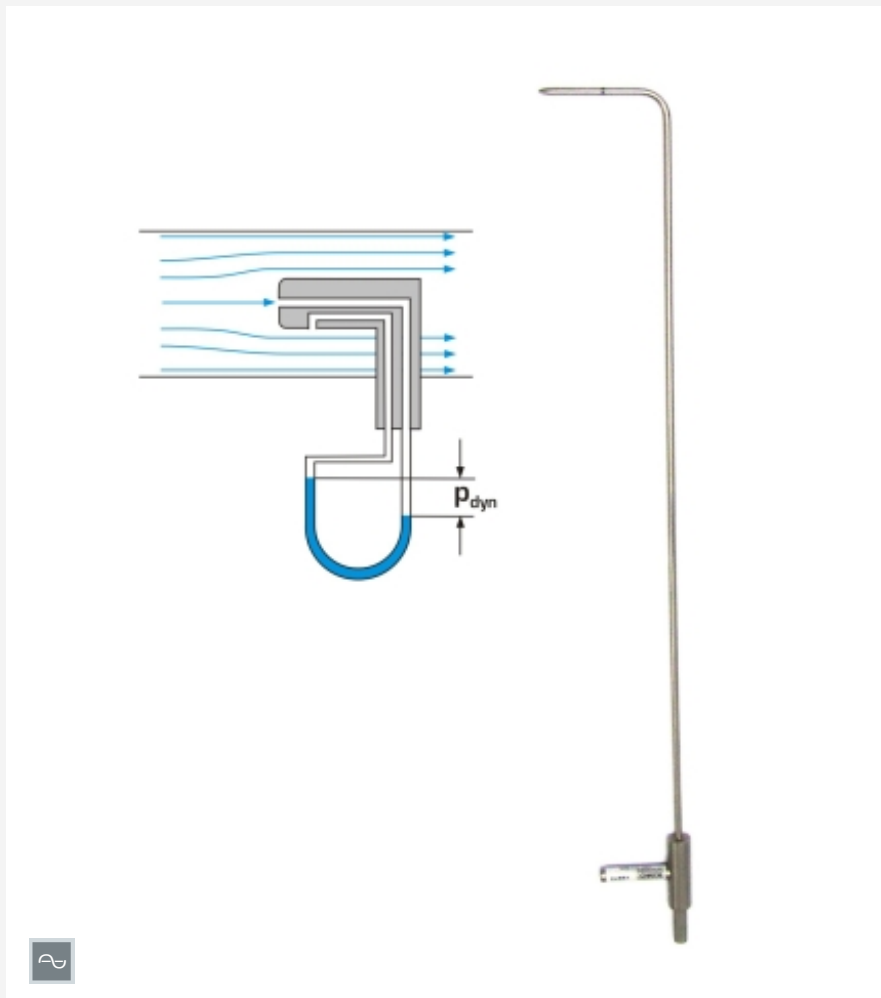


HM 170.33

Pitotstatic tube



Learning objectives/experiments

- measurement of the dynamic pressure component in a flowing fluid
- determination of the velocity in a flowing fluid

Specification

- [1] Pitotstatic tube for measuring pressure in a fluid flow
- [2] accessory for the wind tunnel HM 170
- [3] nickel-plated Pitotstatic tube
- [4] the following units can be used for pressure indication: inclined tube manometer included in HM 170, differential pressure manometer HM 170.53, electronic pressure measurement HM 170.55 or system for data acquisition HM 170.60

Technical data

- Pitotstatic tube
- effective length: 250mm
 - diameter: $\varnothing=3\text{mm}$

Weight: approx. 0,3kg

Scope of delivery

- 1 Pitotstatic tube

Description

- measurement of the dynamic pressure component in a flowing fluid
- determination of the velocity in a flowing fluid

The Pitotstatic tube provides the difference between the total pressure in a flow and the static pressure as a measuring value. The tube is connected to a differential pressure gauge that indicates the dynamic pressure, this is a measure of the velocity of the flow.

To indicate the pressure, the following units are optionally available: inclined tube manometer included in HM 170, differential pressure manometer HM 170.53, electronic pressure measurement HM 170.55 or system for data acquisition HM 170.60.

HM 170.33

Pitotstatic tube

Required accessories

HM 170 Open wind tunnel

Optional accessories

HM 170.50 16 tube manometers, 600mm
HM 170.55 Electronic pressure measurement for HM 170
HM 170.53 Differential pressure manometer
HM 170.60 System for data acquisition