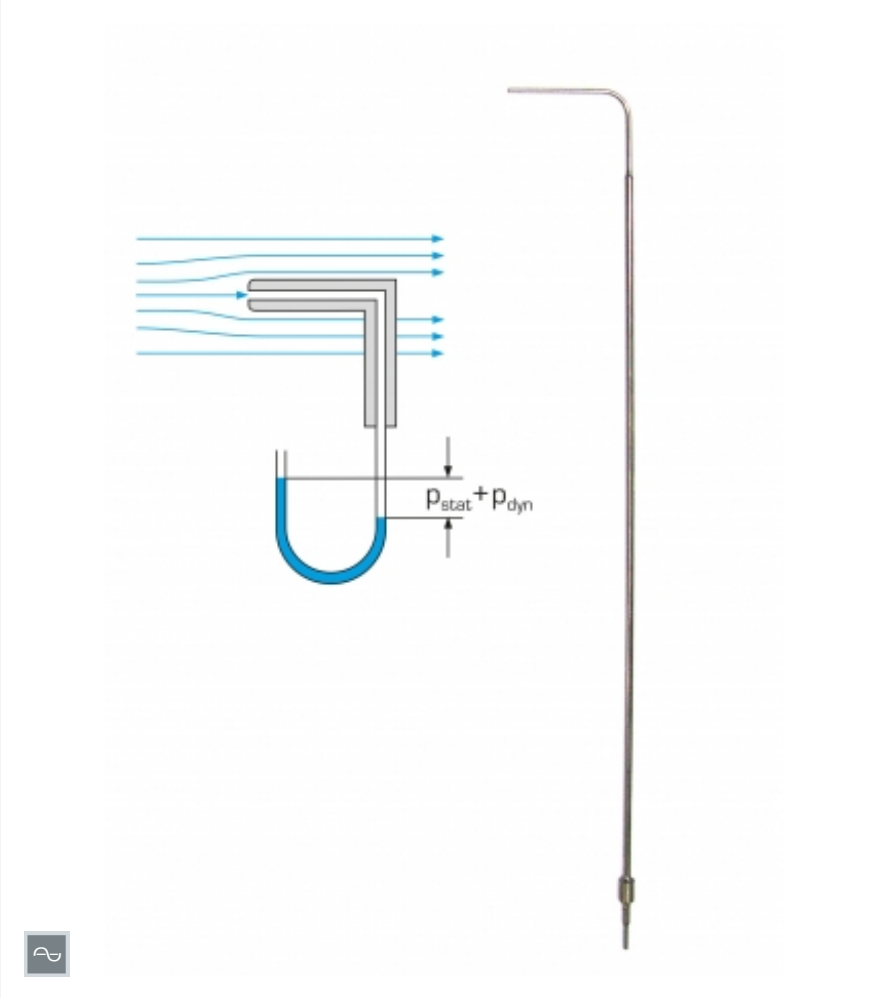
HM 170.32
Pitot tube, small



Description

■ **device for measuring the pressure in a fluid flow**

The Pitot tube enables the total pressure in a fluid flow to be measured. The tube consists of a small tube with a bend, the tube is positioned in the flow such that the opening is facing the direction of flow. By rotating the tube in the flow field, the direction and magnitude of the velocity can be determined.

On the small version, the Pitot tube is enclosed in a protective sleeve that prevents damage to the tube.

Due to the smaller measuring tube, this version is well suited to boundary layer experiments.

If the Pitot tube is connected to a manometer, the pressure measured can be read directly on the manometer. 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.

Learning objectives/experiments

■ measurement of the total pressure in a fluid flow

Specification

[1] Pitot tube for measuring pressure in a fluid flow
[2] Pitot tube made of brass pressure
[3] protective sleeve made of brass, soldered to Pitot 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

Pitot tube
■ effective length: 396mm
■ bend radius: 15mm
■ small limb: 47mm
■ inner diamter: Ø=1,1mm
■ outer diamter: Ø=2mm
Protective sleeve
■ length: 310mm
■ inner diamter: Ø=2,1mm
■ outer diamter: Ø=3mm

Diameter 3mm, effective length 396mm
Weight: approx. 0,2kg

Scope of delivery

1 Pitot tube

HM 170.32
Pitot tube, small

Optional accessories

070.17050	HM 170.50	16 Tube Manometers, 600mm
070.17055	HM 170.55	Electronic Pressure Measurement, 18x 0...500Pa
070.17053	HM 170.53	Differential pressure manometer
070.17060	HM 170.60	System for data acquisition