Thermal flow probe

Application information

Application

ℹ️ Measurement program available as of firmware version 1.05.

The thermal probe 0635 1024 is suitable in conjunction with testo 480 for flow and temperature measurements in ventilation channels and at ceiling/wall outlets.

Overview

1   Flow probe
2   Telescope with scale

Technical data

Feature	Values
Measuring range	0 to +20.00 m/s -20 to +70°C
Accuracy: (at 22°C) ± 1 digit Confidence interval 95%	±(0.03 m/s, ± 5% of meas. val.) ±0.5°C ⬤ **i** Low flow speeds may result in greater measurement uncertainty during temperature measurement!
Adjustment conditions	Adjustment in free jet Ø 350 mm, reference pressure 1013 hPa, based on testo reference Laser Doppler Anemometer (LDA)

> ⬤ **i** The digital probe allows measuring values to be processed directly in the probe. This technology eliminates instrument measurement uncertainty.
>
> For calibration, the probe alone (without the hand instrument) can be sent away.
>
> Calculating the determined calibration data in the probe generates a zero-error display.

Preparing for measurement

1. Pull the telescope out to the required length. The first telescopic segment must be fully extended.
2. Remove the protective cap from the probe head.

Measuring flows

For velocity measurements with a known direction of flow, the arrow mark on the probe head must point in the direction of flow.

The correct measurement value is determined by rotating the probe slightly in both directions until the maximum value is displayed.
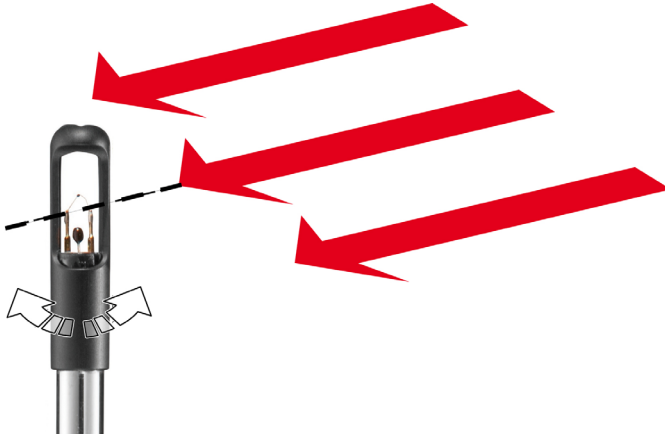
Identifying unknown flow directions

1. Move the hot ball probe into the flow.
2. Match up the probe axis with the assumed flow axis.
3. Read off the measuring value.
4. Rotate the probe 180° and read off the measuring value again.
- The higher measuring value determines the flow direction.

Identifying unknown flow directions

> Rotate the probe 360 °, continuously checking the measuring value.
- The maximum value determines the flow direction, which can then be read off via the marking.

After the measurement

> Slide the protective cap over the probe head.
> Push the telescope back, starting with the telescope segments closest to the handle.