

# testo 420 Flow Hood

Lightweight, tough and accurate.



---

Patented flow straighteners greatly improve accuracy and stability of measurements at turbulent outlets

---

Weighs less than 6.4 lbs. (2.9 kg.)

---

Detachable 420 Multi-function flow instrument that can be used with the 420 flow hood, pitot tubes, or flow matrix

---

Quick, easy remote monitoring and reporting with Bluetooth and free App

---

Data logging using on-board 2 GB memory

---

Logged data can be transfered to PC using mini-USB cable

---

- CFM
- Abs. Press.
- FPM
- Diff. Press.
- °F
- Wet Bulb
- %RH
- Dew Point

The new testo 420 flow hood system is a lightweight, accurate and convenient solution for balancing volume flow at registers and returns. At turbulent outlets, the patented flow straighteners significantly improve measurement accuracy & stability, save time and eliminate the uncertainty of measuring turbulent outlet ducts. Positioning is especially easy with its ergonomic handles, and low weight of less than 6.4 lbs. The optional tripod stand provides convenient handling when testing in large buildings, or at greater heights. The testo 420 flow hood has a wide variety of optional interchangeable flow skirts in different sizes and configurations. The lightweight testo 420 is easy to setup and disassemble and comes in a convenient rollaround case.

The detachable 420 Multi-function flow instrument provides accurate and convenient measurements using the 420 flow hood, Pitot tubes, or the testo flow matrix. Bluetooth connectivity allows for a wide variety of test functions and reporting options using your smart phone or device. The powerful testo 420 App makes testing and reporting versatile, customizable, and convenient. The detachable 420 Multi-function flow instrument is a powerful and precise differential pressure instrument with available calculating and reporting functions built-in. When installed on the testo 420 flow hood, this multi-function flow instrument can be tilted or positioned for convenient viewing and handling. View measured data from a remote location wirelessly on a smartphone or tablet (up to 65ft.).

# Technical data

**testo 420 Flow Hood Kit**

Includes: testo 420 flow hood base, t420 Multi-function Flow Instrument, installed Pitot Flow Matrix, 24" x 24" flow hood with supporting rods, USB cable, batteries, soft case w/handle and wheels and Optional NIST Certification



Part no. 400563 4200

### General technical data

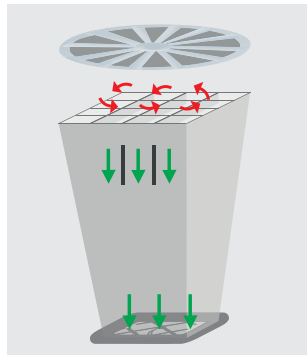
Operating temperature	20 to 140 °F (-5 to +60 °C)
Storage temperature	-5 to 140 °F (-20 to +60 °C)
Weight	6.4 lbs. (2.9 kg)
Standard hood	24" x 24" (610 x 610 mm)
Battery type	Type AA
Battery life	30 hrs
Display	Dot matrix LCD with back-light
Memory	2 GB internal
Interface	Micro USB & Bluetooth
NIST Certification	Optional
Warranty	2 years

### Key Features:

- Data logging directly to on-board 2 GB memory
- Convenient joystick navigation within menu for setting up individual folders
- Total volume flow in CFM (cubic feet per minute) is displayed
- Individual measurement data saved in folders can be recalled and displayed as total volume flow of all measurements
- Logged data can be transferred to PC using micro-USB cable

### Measurement Specifications:

	Flow Volume	Flow Velocity	Air Flow Temperature	Differential Pressure	Absolute Pressure	Relative Humidity	Dew Point / Wet Bulb
Measuring range	25 to 2,300 CFM (40 to 4000 m <sup>3</sup> /h)	0 to 2,750 ft/min (0 to 14 m/s)	-5 to 140°F (-20 to +60 °C)	-0.5 to 0.5 inWC (-120 to 120 Pa)	700 to 1,100 mbar	0 to 100 %RH	20 to 140°F / (-104 to 140 °F)
Accuracy	±3 % of m.v. (+7 CFM)	±2.0 ft/m (0.01 m/s)	±0.9 °F (20 to 140 °F) ±0.5 °C (-5 to 60 °C)	±2 % of m.v. +0.02	±1.2 inWC ±3 mbar	±1.8 %RH +3% m.v.	Not Specified
Resolution	1.0 CFM	0.01 ft/min (0.0001 m/s)	0.1 °F	0.000001 inWC	0.1 mbar	0.1%RH	0.1 °F



Patented flow straighteners tame turbulence to allow more accurate and stable flow readings.



Patented flow straighteners are standard in all 420 flow hood sizes and configurations.



Testo 420 Bluetooth App allows for Smart, hands-free operation. Display and create custom reports on mobile devices. Send reports via email from the job site.





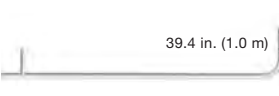
Sturdy, wheeled tripod (optional) for large jobs or sites with high installed outlets. Convenient hands free 420 hood operation with Bluetooth connectivity.

# Accessories

	<b>Part no.</b>
Flow hood 14" x 14" (360 x 360 mm)	0554 4200
Flow hood 12" x 48" (305 x 1220 mm)	0554 4201
Flow hood 24" x 48" (610 x 1220 mm)	0554 4202
Flow hood 36" x 36" (915 x 915 mm)	0554 4203
Tripod, extendable to 13' (4m)	0554 4209
Connection hose; silicone; length 16.4' (5m); max. load 280 inWC (700 mbar)	0554 0440
Connection hose silicone-free for differential pressure measurement, length 16.4' (5m), max. load 280 inWC (700 mbar)	0554 0453
NIST Flow Hood Certification	400520 4403



<p><b>Air Flow Matrix Kit</b> Air flow / velocity matrix, incl. 6ft telescopic extension pole &amp; ball swivel head, two 6ft silicon-free connection hoses and attachment straps</p>		<p style="text-align: right;"><b>Order no.</b> <b>0699 7077/1</b></p>
<p><b>Air Flow Matrix Kit w/ testo 420 Multi-function Flow Instrument</b> Air flow / velocity matrix, and 420 Multifunction Flow Instrument. incl. 6ft telescopic extension pole with ball swivel head, 6ft silicon-free connection hoses, and attachment straps</p>		<p style="text-align: right;"><b>Order no.</b> <b>0699 7077/2</b></p>

<b>Pitot Tubes</b>	<b>Dimensions Probe shaft/probe shaft tip</b>	<b>Measuring range</b>	<b>Part no.</b>
Pitot tube, 20 in. (0.5 m) long, 0.28 in. Dia. (7 mm), stainless steel, for measuring flow velocity*	 20 in. (0.5 m) .28 in. Dia. (7 mm)	Measuring range: 200 to 2,750 ft/min (1 to 14 m/s)  Operating temperature: 32 to 1,112 °F (0 to 600 °C)  Pitot tube factor: 1.0	0635 2045
Pitot tube, 14 in. (0.35 m) long, 0.28 in. Dia. (7 mm), stainless steel, for measuring flow velocity*	 14 in. (0.35 m) .28 in. Dia. (7 mm)		0635 2145
Pitot tube, 39.4 in. (1.0 m) long, 0.28 in. Dia. (7 mm) stainless steel, for measuring flow velocity*	 39.4 in. (1.0 m) .28 in. Dia. (7 mm)		0635 2345

\*Connection hose required (order no. 0554 0440) or (order no. 0554 0453)



Precision measurements for critical applications



Detachable Differential Pressure (t420) instrument allows Pitot tube measurements in ducts (Pitot tube optional)

2016.8

Subject to change without notice.