Data sheet
testo 420

We measure it. testo

Volume flow hood

testo 420 – light, precise and convenient

- Less than 2.9 kg weight
- Flow straightener for more precise measurement at swirl outlets
- Removable and tiltable measuring instrument with a large display
- App integration via Bluetooth for fast and easy monitoring and reporting on site

The new volume flow hood testo 420 is the light, precise and convenient solution for regulating volume flows at larger air intakes and outlets. At swirl outlets in particular, the flow straightener significantly reduces the usual measurement errors. This allows users to fulfil hygienic Indoor Air Quality guidelines and stipulations in ventilation and air conditioning systems quickly and precisely, e.g. in industry, office rooms or in cleanrooms.

Handling is especially easyith a uniquely low weight of less than 2.9 kg and ergonomic handles. The measuring instrument can be tilted and removed for more comfortable readout of the measurement values. In addition to this, mobile devices can be used via Bluetooth App integration as a second display and remote control. This makes the use of a tripod for high ceilings especially secure and comfortable. Users can furthermore use the App to finalize and send the measurement report directly on site.

Technical data

testo 420 set

testo 420 volume flow hood, with measuring instrument, body, 610 x 610 mm flow hood, 5 x tension rods, USB cable, batteries and trolley, incl. calibration protocol

Part no. 0563 4200

testo 420

testo 420 differential pressure measuring instrument incl. batteries and calibration protocol

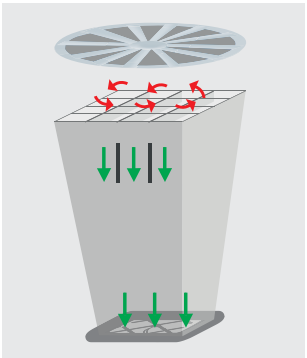
Part no. 0560 0420

General technical data

Compatability	requires iOS 7.1 or newer / Android 4.3 or newer
	requires mobile end device with Bluetooth 4.0
Operating temperature	-5 to +50 °C
Storage temperature	-20 to +60 °C
Weight	2.9 kg
Standard hood	610 x 610 mm
Battery type	Alkali manganese, mignon, Type AA
Battery life	40 h (Zeroing interval 10 seconds, display illumination off, Bluetooth off)
Display	Dot matrix with illumination 3.5 inch
Memory	2 GB internal (approx. 18,000 measurements)
Interface	Micro USB
Warranty	2 years
Material	Measuring instrument housing: ABS Base: PP Standard hood: Nylon

Sensor types

	Volume flow	NTC	Capacitive humidity sensor	Differential pressure sensor	Absolute pressure probe
Measuring range	40 to 4000 m^3/h	-20 to +70 °C	0 to 100 %RH	-120 to +120 Pa	+700 to +1100 hPa
Accuracy ±1 digit	±3 % of m.v. +12 m^3/h at +22 °C, 1013 hPa (85 to 3500 m^3/h)	±0.5 °C (0 to +70 °C) ±0.8 °C (-20 to 0 °C)	±1.8 %RH +3 % of m.v. at +25 °C (5 to 80 %RH)	±2 % of m.v. +0.5 Pa at +22 °C, 1013 hPa	±3 hPa
Resolution	1 m^3/h	0.1 °C	0.1 %RH	0.001 Pa	0.1 hPa



Functional principle of the flow straightener.

Flow straightener for significantly more precise measurements at swirl outlets.

App integration via Bluetooth for displaying the measurement data on mobile devices and finalizing the measurement report on site.

Stable, wheeled tripod with central fitting for secure working at high ceiling outlets.

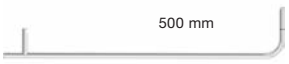
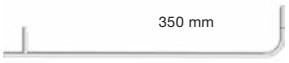
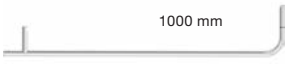
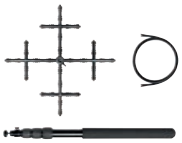
Accessories

	Part no.	
Flow hood 360 x 360 mm, with bag	0554 4200	
Flow hood 305 x 1220 mm, with bag	0554 4201	
Flow hood 610 x 1220 mm, with bag	0554 4202	
Flow hood 915 x 915 mm, with bag	0554 4203	
Tripod, extendable to 4 m, with rollers	0554 4209	
Connection hose; silicone; length 5 m; max. load 700 hPa (mbar)	0554 0440	
Connection hose silicone-free for differential pressure measurement, length 5 m, load up to maximum 700 hPa, (mbar)	0554 0453	

Calibration Certificates

ISO calibration certificate, 15 to 2000 m^3/h bi-directional	0520 0154	
ISO calibration certificate, 10 measurement points regularly distributed over the measuring range (bi-directional) Calibration points 150/300/450/600/750/900/1050/1200/1350/1500 Nm^3/h	0520 0194	
ISO calibration certificate, 5 measurement points regularly distributed over the measuring range (bi-directional) Calibration points 300/600/900/1200/1500 Nm^3/h	0520 0164	
DAkkS calibration certificate, 15 to 1800 Nm^3/h bi-directional	0520 1264	
DAkkS calibration certificate, 10 measurement points regularly distributed over the measuring range (bi-directional) Calibration points 150/300/450/600/750/900/1050/1200/1350/1500 Nm^3/h	0520 0294	
DAkkS calibration certificate, 5 measurement points regularly distributed over the measuring range (bi-directional) Calibration points 300/600/900/1200/1500 Nm^3/h	0520 0264	

Pitot tubes / air flow velocity matrix

Probe type	Dimensions Probe shaft/probe shaft tip	Measuring range		Part no.	
Pitot tube, 500 mm long, Ø 7 mm, stainless steel, for measuring flow velocity*		Measuring range: 1 to 100 m/s Operating temperature: 0 to +600 °C Pitot tube factor: 1.0		0635 2045	
Pitot tube, 350 mm long, Ø 7 mm, stainless steel, for measuring flow velocity*		Measuring range: 1 to 100 m/s Operating temperature: 0 to +600 °C Pitot tube factor: 1.0		0635 2145	
Pitot tube, 1000 mm long, stainless steel, for measuring flow velocity*		Measuring range: 1 to 100 m/s Operating temperature: 0 to +600 °C Pitot tube factor: 1.0		0635 2345	
Air flow velocity matrix, telescope with ball head, length 1.8 m, with 2 x 2 m connection hose, silicon-free, with Velcro attachment on the telescope, for connection to differential pressure measuring instrument			ID no. 0699 7077/1	0635 8888	
Air flow velocity matrix, telescope with ball head, length 1.8 m, with 2 x 2 m connection hose, silicon-free, with Velcro attachment on the telescope, and testo 420 measuring instrument			ID no. 0699 7077/2	0635 8888	

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

Comfortable measurement thanks to low weight

Removable instrument allows Pitot tube measurements in ducts (Pitot tube available separately)

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