

Measure Pressure and Flow

testo 512

testo 512 shows pressure and flow simultaneously in an easy-to-read, large, backlit display. Measurement data is printed on site with date and time as well as minimum and maximum values. testo 512 has two switchable units for flow: m/s and fpm. Eight units can be set for pressure: kPa, hPa, Pa, mm H₂O, mmHg, psi, inch H₂O, inch Hg.

Adjustable smoothing for sliding mean calculation, density compensation is built-in. The displayed actual value can be frozen in the display by pressing the HOLD button. The measured minimum and maximum value can be displayed and stored in the meter.

TopSafe protects the meter in the field from impact, dirt and splash water.

- 8 units for pressure: kPa, hPa, Pa, mm H₂O, mmHg, psi, inch H₂O, inch Hg
- 2 units for flow: m/s, fpm
- Built-in density compensation
- Display light
- Hold/Max/Min function
- Readings printout with date/time and min./max. values



Simultaneous display of flow and pressure value



Measuring process air

0 to 2 hPa/mbar	1
testo 512 differential pressure meter, 0 to 2 hPa, incl. battery and calibration protocol	
Part no. 0560 5126	

0 to 20 hPa/mbar	2
testo 512 differential pressure meter, 0 to 20 hPa, incl. battery and calibration protocol	
Part no. 0560 5127	

0 to 200 hPa/mbar	3
testo 512 differential pressure meter, 0 to 200 hPa, incl. battery and calibration protocol	
Part no. 0560 5128	

0 to 2000 hPa/mbar w/o flow	4
testo 512 differential pressure meter, 0 to 2000 hPa, incl. battery and calibration protocol	
Part no. 0560 5129	

Technical data	1	2	3	4
Meas. range	0 to +2 hPa +2 to +17.5 m/s	0 to +20 hPa +5 to +55 m/s	0 to +200 hPa +10 to +100 m/s	0 to +2000 hPa
Resolution	0.001 hPa 0.1 m/s	0.01 hPa 0.1 m/s	0.1 hPa 0.1 m/s	1 hPa
Overload	±10 hPa	±200 hPa	±2000 hPa	±4000 hPa
Accuracy	0.5% of fsv			
Measuring medium	All non-corrosive gases			
Display	LCD, 2 lines			
Oper. temp.	0 to +60 °C			
Storage temp.	-10 to +70 °C			
Battery type	9V block battery, 6F22			
Battery life	120 h			
Auto Off	10 min			
Dimensions	202 x 57 x 42 mm			
Weight	300 g			

Accessories Ordering data	Part no.
9V rech. battery for instrument, instead of battery	0515 0025
Recharger for 9V rechargeable battery, for external recharging of 0515 0025 battery	0554 0025
Hose connection set for gas pressure measurement on heating systems, silicone hoses and T-pieces incl.	0554 0315
Printer and Accessories	Part no.
Testo printer with wireless IRDA and infrared interface, 1 roll of thermal paper and 4 AA batteries	0554 0547
Spare thermal paper for printer (6 rolls), permanent ink, measurement data documentation legible for up to 10 years	0554 0568
Spare thermal paper for printer (6 rolls)	0554 0569
Transport and Protection	Part no.
TopSafe, protects from impact and dirt	0516 0221
Case for measuring instrument and probes	0516 0210
Transport case for measuring instrument and probes (405 x 170 x 85 mm)	0516 0201

Pitot tube measurement	Part no.
Pitot tube, 350 mm long, stainless steel, measures flow speed	0635 2145
Pitot tube, 500 mm long, stainless steel, measures flow speed, Longer versions on request	0635 2045
Pitot tube, 1000 mm long, stainless steel, measures flow speed in combination with pressure probes, Longer versions on request	0635 2345
Connection hose, silicone, 5m long, max. load 700 hPa (mbar)	0554 0440
Calibration Certificates	Part no.
DKD calibration certificate/pressure, diff. and pos. pressure; 11 measuring points distributed over the instr. meas. range	0520 0215
ISO calibration certificate/pressure, differential pressure; 5 points distributed over meas. range	0520 0005



Pressure meters for all measurement ranges

testo 521-1/-2 with internal sensor 0 to 100 hPa

Highly accurate with internal differential pressure sensor, ideal for inspecting extraction units and ventilators and for monitoring pressure drops in filters. When used with the Pitot tube, the internal pressure sensor measures velocities from 5 - 100 m/s. The 100 Pa probe, which can be connected externally, measures accurately from 1 - 12 m/s.

testo 521-3 with internal sensor 0 to 250 Pa

Using testo 521-3 even the smallest differential pressures up to 250 Pa are measured. High accuracy and a resolution of 0.1 Pa mean the instrument is ideal for differential pressure measurements in clean rooms.

When used with a Pitot tube, the internal pressure sensor measures flow speeds in the range 1 to 20 m/s.

Save data according to site and analyse on PC/notebook



Pitot tube measurement with external 100 Pa probe

- Temp. compensated differential pressure sensor built into instrument
- Calculation of velocity and volume flow via Pitot tube measurement
- Multi-point and timed mean calculation
- 2 probe sockets for pressure and temperature

testo 521-1 / 0 to 100 hPa

Accuracy 0.2% of fsv

Differential pressure meter 0 to 100 hPa incl. battery and calibration protocol

Part no. 0560 5210

testo 521-2 / 0 to 100 hPa

Accuracy 0.1% of fsv

Differential pressure meter 0 to 100 hPa incl. battery and calibration protocol

Part no. 0560 5211

testo 521-3 / 0 to 2.5 hPa

Accuracy up to ± 0.5 Pa

testo 521-3, differential pressure meter 0 to 2.5 hPa, battery and calibration protocol included

Part no. 0560 5213

Accessories Ordering data

Accessories Ordering data	Part no.
Connection hose, silicone, 5m long, max. load 700 hPa (mbar)	0554 0440
Connection hose set, 2 x 1 m, coiled, incl. 1/8" screw connection, Pressure-tight up to 20 bar, for probe 0638 1647/1747/1847	0554 0441
Cable, 1.5 m long, connects probe with plug-in head to meas. instrument, PUR coating material	0430 0143
TopSafe (protection case), incl. carrier strap, bench stand and magnet. Protects instrument from dust, impact, scratches	0516 0446
Testo printer with wireless IRDA and infrared interface, 1 roll of thermal paper and 4 AA batteries	0554 0547
ComSoft 3 - Professional with data management, incl. database, analysis and graphics function, data analysis, trend curve	0554 0830
RS232 cable, connects instrument to PC (1.8 m) for data transfer	0409 0178
Transport case, for measuring instrument, probes, Prandtl Pitot tube, accessories	0516 0527

Technical data

testo 521-1 / testo 521-2

	Piezoresistive pressure sensor (internal)	Piezoresistive pressure sensor for external pressure probes
Probe type	Piezoresistive pressure sensor (internal)	Piezoresistive pressure sensor for external pressure probes
Meas. range	0 to 100 hPa	0 to 2000 hPa
Accuracy ± 1 digit	± 0.2 % of fsv(testo 521-1) ± 0.1 % of fsv(testo 521-2)	± 0.1 % of mv
Resolution	0.01 hPa	0.1 Pa (0638 1347) 0.001 hPa (0638 1447) 0.1 hPa (0638 1647; 0638 1747; 0638 1847)
Overload	300 hPa	
Static pressure	2000 hPa	

testo 521-3

	Piezoresistive pressure sensor (internal)	Piezoresistive pressure sensor for external pressure probes
Probe type	Piezoresistive pressure sensor (internal)	Piezoresistive pressure sensor for external pressure probes
Meas. range	0 to 2.5 hPa	0 to 2000 hPa
Accuracy ± 1 digit	± 0.5 Pa (0 to 20 Pa) $\pm (0.5 \text{ Pa} \pm 0.5\% \text{ of mv})$ (20.1 to 250 Pa)	± 0.1 % of mv
Resolution	0.1 Pa	0.1 Pa (0638 1347) 0.001 hPa (0638 1447) 0.1 hPa (0638 1647; 0638 1747; 0638 1847)
Overload	50 hPa	
Static pressure	100 hPa	

Common data

Oper. temp. (compensated)	0 to +50 °C	Dimensions	219 x 68 x 50 mm
Storage temp.	-20 to +70 °C	Weight	300 g
Memory	25,000	Display	LCD, 2 lines
PC	RS232 interface	Battery type	9 V (6LR61)