

WÖHLER

ENSURING SAFETY THROUGH MEASUREMENT



Wöhler DP 600 Leakage Tester

Testing for leaks in flue gas pipes and chimneys / 4 Pa Test



Wöhler DP 600 Leakage Tester

Leakage test of flue gas pipes and chimneys
and performance of 4 Pa Tests

To ensure the safe removal of combustion gases, it is crucial for flue gas systems to be tightly sealed. The level of tightness required varies depending on the type of system, and this can be determined using an appropriate test. The Wöhler DP 600 is a reliable device that can safely and accurately perform this test for all types of flue gas systems. It can assess the tightness using negative pressure, positive pressure, and high pressure methods. Additionally, this device is versatile and can also be used to test the combustion air supply according to TRGI worksheet G 625, which is a German technical rule for gas installation. Furthermore, it can conduct the furnace leak test in accordance with DIBt guidelines, a German certification that confirms the fireplace's special impermeability as a room-sealed fireplace.

Leakage test according to DIN EN 1443:

A leakage test is necessary for non-combustion air-flushed positive pressure flue gas ducts of tightness class P1 and H1 in buildings. The measurement should always be conducted according to the tightness class specified by the manufacturer for the flue gas pipe. The Wöhler DP 600 Leakage Tester is suitable for testing all types of flue gas pipes. It can perform H-tests (in high-pressure operation), P-tests (with positive pressure), and N-tests (with negative pressure). The device has a pressure measuring range of $\pm 7,000$ Pa and can handle volume flows of up to 200 m³/h. The tightness classes are pre-set, ensuring that the measurement is always standardised and automatic. To begin the test, the device uses two fans to create the specified test pressure for the system. It then measures the volume flow needed to maintain the test pressure, compares it with the permissible leakage quantities according to EN 1443, and provides the corresponding assessment. By printing out the measurement report, you will have proof that your flue gas system meets the required standards.

TÜV
TÜV-tested

TÜV
Certification for
4 Pa
verification



Setting up for measurement is easy: Just connect the pressure and air hose, input three values, and you're good to go!



Ensuring safety and meeting standards: Testing a type N chimney under negative pressure conditions at either 20 Pa or 40 Pa.

Advantages

- ▶ Air volume flow adjustable up to 200 m³/h
- ▶ Extended ultra-fine pressure measuring range up to $\pm 7,000$ Pa
- ▶ All tightness classes for flue gas systems preset in accordance with EN 1443 (N / P / M / H)
- ▶ 4 Pa-Test in the detailed procedure (TRGI 2018)
- ▶ Variable mode with freely selectable pressure and leakage limit value
- ▶ PC software for advanced applications

Technical Data

Pressure

Measurement range:	±7,000 Pa
Resolution:	0.1 Pa from 0...900 Pa 1 Pa starting from 900 Pa
Accuracy:	±0.5 Pa ±2.5 % from measured value

Volume flow without adapter

Measurement range:	0...200 Nm ³ /h
Resolution:	0.1 Nm ³ /h
Accuracy:	±2.5 Nm ³ /h ±5 % from measured value

Volume flow rate with adapter 3.0

Measurement range:	0...10 Nm ³ /h
Resolution:	0.01 Nm ³ /h
Accuracy:	±0.05 Nm ³ /h ±5 % from measured value

Volume flow rate with adapter 0.3

Measurement range:	0...18 NL/min
Resolution:	0.01 NL/min
Accuracy:	±0.05 NL/min ±5 % from measured value

Application

- ▶ Leakage tests with leakage rates of up to 200 m³/h in positive and negative pressure and on H-classified flue gas systems with a test pressure of 5,000 Pa
- ▶ Proof of sufficient combustion air supply according to TRGI worksheet G 625 - simplified and detailed procedure
- ▶ Furnace leak test according to DIBt guidelines for quality assurance

Functionality

- ▶ Air volume flow adjustable up to 200 m³/h
- ▶ Extended ultra-fine pressure measuring range up to ±7,000 Pa
- ▶ Preset tightness classes for flue gas systems according to EN 1443 N / P / M / H (N=flue gas system in low-pressure operation (chimney), P=flue gas system with low overpressure (flue gas pipe), M=flue gas system with medium overpressure (flue gas pipe), H=flue gas system in high-pressure operation (CHP))
- ▶ 4 Pa-Test in the detailed procedure (TRGI 2018)
- ▶ Variable mode with freely selectable pressure and leakage limit value

Data management

- ▶ Storage of up to 100 measurements
- ▶ Permanent data storage on the device
- ▶ Customer and data management via Wöhler DC series PC software (optional accessory)
- ▶ Data transfer via USB connection
- ▶ Printout of the measurement results with diagram display via Wöhler TD 100 Thermal Fast Printer (optional accessory)

Special Features



The 4 Pa Test can be carried out in a detailed procedure to prove that there is sufficient combustion air. The Wöhler DP 600 guides you safely through the measurement menu.

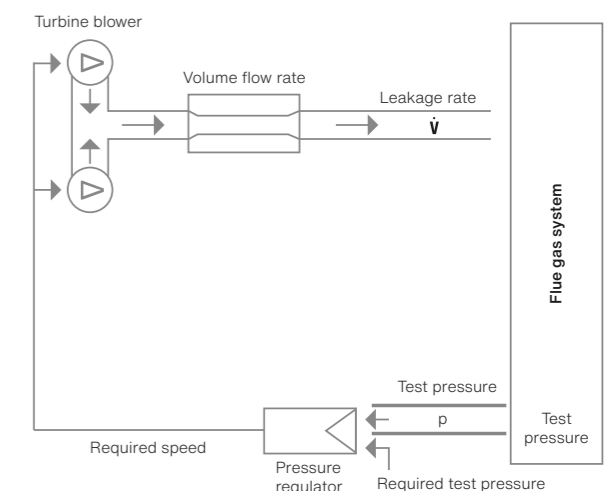


Leakage test of the flue gas system: In preparation for the test, the flue gas pipe is sealed at the top and bottom with sealing bubbles. This is very simple, as the bladders can be easily pushed through the pipe from below using a reel and then position them.

Schematic measurement setup

When testing for leakages, the test specimen is subjected to a constant overpressure. The volume flow required to maintain the overpressure corresponds to the leakage rate of the test specimen.

The Wöhler DP 600 generates a volume flow via two turbine fans and feeds it into the sealed exhaust system via a hose. As a result of the incoming air, the pressure in the flue gas system rises. This pressure is fed back to the measuring device via a second hose and is measured. The turbine fans are controlled by comparing the target test pressure with the actual test pressure in the flue gas system.



Basic & Accessory Sets



Wöhler DP 600
Leakage Tester



Sealing Set Compact
for P/M/H Test

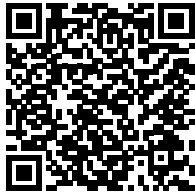


Sealing Set
Type „N“

Scope of delivery

	Wöhler DP 600 Leakage Tester	Sealing Set Compact for P/M/H Test	Sealing Set Type „N“
Wöhler DP 600 Leakage Tester	●		
Adapter for all leakage measurements on flue gas systems	●		
Mains cable	●		
Sealing Bladders Compact with and without gas lead through Ø 40 – 150 mm		●	
Telescope Set Sealing Bladder Compact Ø 40 – 150 mm		●	
Aluminium Pump Master-Blaster		●	
Various sealing elements (round and square)			●
Extension pipe			●
Air hoses			●
Pressure hose 4 m			●
Article no.	2678 J	6578 J	2927 J

● = included



Scan the QR code and learn more!

WÖHLER

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