

Leak and Obstruction Tester

# P-TEST

**P-TEST** series is our electro pneumatic equipment for air pressure decay leak and obstruction testing of elastic or rigid medical devices such as blood lines, infusion and transfusion sets, bags, filters, oxygenators and many other disposable products.

Operational conditions can be programmed in a wide range of pressures and times. The P-TEST technical features, along with the new operative interface, makes its use even simpler. It can be used for validation and qualification purposes on QA and R&D Departments, but mainly in production lines for routine controls of finished products.



## **P-TEST series performs 4 different test types:**

- Leak Test (Pressure Decay / Leak Rate)
- Single Obstruction Test (Pressure Monitor) only with P-TEST One and Nine
- Multiple Obstruction Test (only with P-TEST one)
- Vacuum Test

**Tecnoideal**

Gruppo  
**MEDICA**  
Group

## LEAK TEST

The device to be tested is connected to the test port of the equipment and it's pressurized at the preset value.

P-TEST checks the leak by measuring the pressure decay in the test time.

## OBSTRUCTION TEST (Pressure Monitor) only with P-TEST One and Nine

The equipment can detect obstructions by blowing air through the part to test by mean of the measure of the pressure at the inlet point. The equipment determines the condition of partial or total obstruction.

## VACUUM SYSTEM FOR P-TEST

This solution can be used when two tests have to be performed at the same time. The two testers can be of different scale or models including vacuum test (vacuum is externally generated).

## TECHNICAL SPECIFICATIONS

	P-TEST Plus 500	P-TEST Plus 15	P-TEST Plus 60	P-TEST One	P-TEST Nine	P-TEST Vacuum
Range of test pressure	<b>10.0-500.0 hPa/mBar</b> (1.00-50.00 kPa 7.5-375.0 mmHg 102-5098 mmH2O 0.146-7.252 PSI)	<b>30-1500 hPa/mBar</b> (3.00-150.00 kPa 23-1125.0 mmHg 310-15300 mmH2O 0.44-21.76 PSI)	<b>120-6000 hPa/mBar</b> (12.00-600.00 kPa 90-4500 mmHg 1220-61180 mmH2O 1.74-87.05 PSI)	<b>50-1013 hPa/mBar</b> (38-760 mmHg 0.72-14.70 PSI)	<b>250-9000 hPa/mBar</b> (190-6750 mmHg 3.7-130.5 PSI)	<b>50-800 hPa/mBar</b> (38-600 mmHg -0.72-11.60 PSI)

Type of tests	Leak Test			Leak Test, multiple and single obstruction		
Power Supply	<b>110-240V, 50-60Hz, 40 VA</b>					
Electrical Protection	Electromagnetic interface filter and 2 1AT fuses					
Accuracy	0.25% of full scale			0.5% of full scale	2.5% of full scale	0.5% of full scale
Decay Resolution	0.01 hPa	0.05 hPa	0.1 hPa	0.2 hPa	0.2 hPa	
Serial Ports	USB					
PLC interface	PNP, isolated, 10-30Vdc; 8-pin connector (start/stop/passed/failed)					
Pressure Units	HPa(0mBar), kPa, mmHg, mmH2O, PSI			HPa(=mBar), mmHg, PSI		
Memory	Up to 100 test programs, with date time and alphanumeric 16-digit code			Up to 10 test programs		
Acoustic signal	Different tones and programmable duration, for positive and negative results					
Protection	Ip40					
Operating conditions	Temperature from 10 to 40°, relative room humidity max. 80%					
International standards	2006/42/CE,2004/108/CE,2006/95/CE					
Product code	P-TEST Plus 500 <b>98167</b>	P-TEST Plus 15 <b>98168</b>	P-TEST Plus 60 <b>98169</b>	P-TEST One <b>98155</b>	P-TEST Nine <b>98175</b>	P-TEST Vacuum <b>98155-029</b>

# P-TEST

## SECURITY OF DATA & QUALITY SYSTEM

Before its release to the market, quality and performances of the product need to be accurately tested with our P-TEST, together with calibration and certification procedure performed with certified equipment you can comply with this requirement.

International Standards pay special attention to measuring and testing equipment. Metrological management of the testing equipment has become compulsory for all companies that manufacture medical devices. Each new P-TEST is provided with a Calibration Certificate with values measured at seven points of the scale. By taking advantage of Tecnoideal Calibration Service, you can easily comply with International Standard Regulations.

The date of the last calibration performed is stored in the memory and is automatically displayed each time the machine is switched on.



## Vacuum Generator with P-TEST Vacuum

The system can perform a test under vacuum and includes vacuum generator.

## 6 WAY SEQUENCER FOR P-TEST

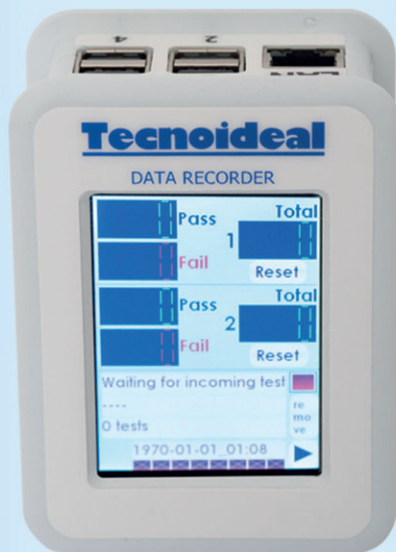
This module works in combination with a leak tester and allows to switch automatically the test from one to another of the six products connected at the system ports. Connection and disconnection operations are in masked time.



## HOLDER FOR BAGS

Testing of medical plastic bags requires the use of dedicated holders to contain the plastic deformation due to the test pressure. Holders are available in two

versions:  
**Flat surface**  
**Knurled surface**



## DATA RECORDER

- Up to 8 leak testers connected
- Usb key to store testing data
- Possibility to insert usb key at any time and save data
- Up to 100.000 saved records
- 2 groups of three counters, each with a dedicated reset button: pass record-fail record-total counter

## ACCESSORIES

Holder 300x400mm, flat surface	98085
Holder 300x400mm, knurled test surface	98172
Holder 400x500mm, at test surface	98086
Holder 400x500mm, knurled test surface	98087
Foot Switch for P-TEST	T70239
Usb cable for P-TEST One/Plus	T19221
P-TEST One.sys (data extraction software)	T78036
P-TEST Plus.sys (data extraction software)	T78077
Data Recorder	98207
6 Way Sequencer for P-Test	98199

## HOW TO ORDER