TESTING WITH CONTINUOUS
MEASURE OF LEAK FLOW
RATE AT BALANCED
PRESSURE



INNOVATIVE COLOUR GRAPHIC DISPLAY TOUCH SCREEN FULLY INTERFACEABLE

- Fast test of, for eg: filters, valves, taps, cooktops ...
- Leakage measure with mass flow sensor: fullscale ranges up to 100 cm³/min resolution up to 0.1 cm³/h
- Pressure measurement and regulation: fullscale ranges up to 10 bar resolution up to 1 Pa
- 50 test programs with sequence mode
- Digital I/O interface
- USB and RS232/RS422/RS485 serial lines
- Test recording on USB memories (option)
- Real time SPC statistics (option)



Further information at: www.tecnasrl.com/products/t3pq











Provaset T3PQ is an electropneumatic instrument, designed for testing air tightness by direct measurement of air leakage.

The balanced pressure method allows for measurements that are independent from the tested volume and offers the best stability and precision.

The touch interface, with color display and real-time view of testing, make programming and use simple and immediate.

PROVASET T3PQ is suitable for use in all industrial segments, on testing benches, production lines or fully automated systems.

Finally, the control of external automations, the interface with barcode readers and printers and the possibility to record the tests on USB memories or via ethernet make it a complete and suitable instrument for the most modern production methods.



Easily adjustable testing parameters



Real-time SPC analysis and production graphs



Graphical display of the testing cycle



T3PQ is entirely designed and manufactured in Italy.
Our products guarantee an excellent quality
and the best value for money.

Provaset T3PQ

| | SPECIFICATIONS |
|-------------------------|---|
| Power supply | Universal: 85÷264 Vac, 47÷63 Hz, 30 VA (24 Vdc option) |
| Compressed air line | Dry, non-condensing, 5-micron filtered, and oil-free air, compliant with ISO8573-1. |
| A/D converters | 24 bits |
| Class | Pressure: 0.5% FS Flow: 2% FS |
| Calibration | Calibration certificates for pressure and flow sensors Software-guided procedure with sample instruments. |
| Pressure regulator | Electronic |
| Keyboard | Resistive touch screen |
| Display | 3.5" colour TFT LCD display with touchscreen |
| Indicators | 4 LED lights (testing phases, pass/reject outcome) |
| Test counter | Pass and Reject totals, resettable to zero Statistic option: mean value, minimum, maximum, standard deviation, normal distribution, CP, CPK, hour production totals |
| Audible alarm | Built-in beeper with programmable duration |
| Clock | Date and time, with supercap, max autonomy 7 days |
| Programmable parameters | 50 testing tables with sequence mode |
| PLC connections | 4 photocoupled inputs and 4 photocoupled outputs Each I/O is fully programmable Control of external automation (coupling, security cage) without PLC |
| Data interfaces | Configurable RS232/RS422/RS485/USB slave interface Protocols: Modbus RTU, CSV ASCII output, barcode, printer |
| Staubli® Connector | Standard, for certificated Leak Master |
| Housing | Unpainted anodized aluminium, ABS |

Calibration service

All equipment is accompanied by a calibration certificate released by Tecna srl. According to the requirements of ISO9001 standard, calibration must be verified at specified intervals against national or international test samples.

Tecna srl, through its specialized personnel and certified instruments, offers a complete scheduled calibration service.

OPTIONS

- 2 programmable pneumatic outputs for external commands (coupler/marker)
- I/O expansion: adds 4 inputs + 4 digital outputs and 1xRS232/RS422/RS485 serial line
- 24Vdc power supply
- · Additional RS232/422/485, USB, Ethernet, ProfiBUS or CANbus interfaces for remote control and data collection
- Real time SPC statistical analysis
- Software for managing label printer and barcode reader

ACCESSORIES

- · Air filters and oil separators
- Remote control keypad
- · 3-colour indicator light with loud sound alert
- Certificated Leak Master

CUSTOMIZED PROGRAMS FOR PC/HMI TERMINAL

Viewing and management of several testing stations. Parameter programming and SPC analysis of test data.

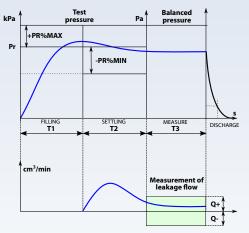
MEASURING THE LEAKAGE FLOW

At the end of the phases of filling and settling, the pressure is maintained constant by the internal electronic controller. The flow that originates therefore corresponds to the flow required to maintain the product under test at the test pressure programmed and thus corresponds to the leakage flow.

The leak is measured continuously allowing the operator to immediately execute processes of adjustment or repair.

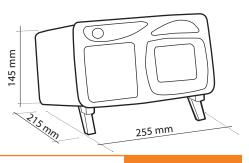
This method is very effective and flexible and allows a significant reduction of the test time.

OPERATING PRINCIPLE



The test cycle could also be programmed to automatically start when product in test is connected to the instrument.

DIMENSIONS



Distributed by:

Virtual Instrument for National Instruments LabView™ available at request.

