

EQUIPMENT FOR LEAK TESTS BY ABSOLUTE PRESSURE DECAY MEASUREMENT



- Leak test with full scale up to 30 bar and in vacuum
- Resolution up to 0.1 Pa (0.001 mbar)
- 7" colour LCD with touchscreen
- 300 test programs
- 300 test sequences
- Electronic pressure regulation
- Digital I/O interfaces for PLCs, RS232/ RS485 serial lines, USB for PC and Ethernet



DESCRIPTION

TL3P is an innovative device for leak tests by absolute pressure decay measurement.

The touch interface, with the color display and the testing real-time view, make the programming and use simple and immediate. Its high measurement resolution and test accuracy, together with the electronic regulation of the filling pressure, allow to perform not only leak tests but also destructive burst test, safety valves opening checks, volumetric control, obstruction tests and "in bell" tests on sealed products or by interception method. The control of external automations, the interface with barcode, Qrcode 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 applications.

ABSOLUTE PRESSURE DECAY

The testing cycle is based on the pressure decay measured inside of the component being tested, which must be below the set limit to pass the test.

For tests on sealed products or strength tests (burst tests) you can set up customized testing cycles. Furthermore, if the electronic pressure adjustment is available, you can set up customized filling ramps.



CALIBRATION SERVICE

Each equipment is accompanied by a calibration report released by Tecna srl.

According to the requirements of ISO9001 standard, calibration must be verified at specified intervals against national or international test masters.

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

Provaset T3LP

Power supply	External 24 Vdc; alternatively 85÷264 Vac, 35W
Compressed air line	Dry, non-condensing, 5-micron filtered and oil-free air, compliant with ISO8573-1
Sensor calibration	Software-guided procedure with primary instruments.
A/D converter	24 bits
Pressure Regulator	Electronic, with dedicated pressure transducer to visualize the regulated pressure on the display
Keyboard	Resistive touch screen
Display	7" colour TFT LCD display with touchscreen
Indicators	4 LED lights (testing phases, pass/reject outcome)
Test counter	Passed and Rejected 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	300 testing tables with sequential mode, general parameters, volume calculation to indicate the leak rate in cm ³ / min or cm ³ /h
PLC connections	8 photocoupled inputs and 8 photocoupled outputs Each I/O is fully programmable Control of external automation (coupling, security cage) without PLC
Data interfaces	Configurable RS232/RS485 serial lines USB device interface and Ethernet Protocols: Modbus RTU, CSV ASCII output, barcode, Qrcode, printer
Staubli® Connector	Standard, for Leak Masters
Housing	Unpainted anodized aluminium

SPECIFICATIONS

OPTIONS

- Double channel circuit
- Setup for vacuum test
- · 2 programmable pneumatic outputs for external commands (plug/marker)
- I/O expansion: adds digital PLC inputs/outputs (8+8) and a RS232/RS485 serial line
- · Additional USB, Ethernet, ProfiBUS or CANbus interfaces for remote control and data collection
- Real time SPC statistical analysis
- · Software to manage a label printer and a barcode or Qrcode reader

ACCESSORIES

- Air filters
- · Certificated Leak Master to be inserted in the Staubli® connector
- Holders for burst test
- Barcode, Qrcode reader and printer
- Remote control keypad
- 3-colours indicator light with loud sound alert
- External valve for volume check and tests in sealed "bell"

CUSTOMIZED PROGRAMS FOR PC/HMI TERMINAL

- Software to collect and manage the data of the tests
- Parameter programming and SPC analysis of test data
- Virtual Instrument for National Instruments LabVIEW $^{\scriptscriptstyle \rm M}$ available at request





