



Provaset T3LMF

AIR FLOW-RATE LEAK TESTER
SMALL LEAKS, LARGE VOLUMES
BASED ON THE HIGH PERFORMANCE MASS-FLOW METHOD



- Tests in positive and negative pressure
- Flow measurement in the range of vacuum and 2 bar, $\pm 50 \text{ cm}^3/\text{min}$, resolution $0.01 \text{ cm}^3/\text{min}$
- 300 test programs
- 300 test sequences
- Digital I/O interfaces
- USB, RS232/RS485 serial lines for PC, Profinet, Ethernet



DESCRIPTION

Provaset T3LMF is an electro-pneumatic instrument, designed for air flow-rate tests on very large volumes components.

The most suitable applications concern big size parts such as: electric car battery packs and assemblies, cooling channels, tanks ...

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

Provaset T3LMF is suitable for use in many industrial segments with special focus on e-mobility and battery, on testing benches, production lines or fully automatic systems.

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 methods.

CONTINUOUS FLOW OR TRANSFER FROM A PRE-FILLING VOLUME

The part can be filled either through a continuous flow or a pre-filled volume for maximum performance.

TESTS IN POSITIVE AND NEGATIVE PRESSURE

T3LMF models perform tests in positive and negative pressure, managing an external vacuum source. The models with bidirectional mass flow sensor will be accompanied by two calibration reports or certificates.

CALIBRATION SERVICE

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

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

Tecna and Marposs, through its specialized personnel and certified instruments, offer a complete calibration service.

TEST

Provaset T3LMF

Rev 11/22

SPECIFICATIONS

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 (1.2.1)
Calibration	Calibration reports or certificates for pressure/flow sensors Software-guided procedure with sample instruments
Test Pressure	Continuous flow: 1.5 bar Pre-filled volume: 2 bar
Display and Keyboard	7" colour TFT LCD display with resistive touchscreen
Indicators	4 LED lights (testing phases, pass/reject outcome)
Test counter	Pass and Reject totals, resettable to zero
Audible alarm	Built-in beeper with programmable duration
Programmable parameters	300 testing tables with sequential mode, general parameters
Digital IO	8 (+8 optional) programmable inputs and 8 (+8 optional) programmable outputs
USB	2 host for firmware update, barcode reader (optional), data collection, backup and restore 1 slave for computer interface
LAN and Fieldbus	1 RJ45 Ethernet Profinet, ProfiBUS (optional)
Serial	1 port configurable RS232/RS485
Interfaces and Protocols	Profinet, ProfiBUS, Modbus RTU - TCP/IP, CSV ASCII, barcode, Qrcode, printer, jServer
Staubli® Connector	Standard, for Leak Masters
Housing	Unpainted anodized aluminium, ABS

OPTIONS

- Continuous flow kit with high precision regulator
- 2 programmable pneumatic outputs for external commands (plug/marker)
- Setup for test in negative pressure
- I/O expansion: adds digital PLC inputs/outputs (8+8) and a RS232/RS485 serial line
- Additional Profinet, USB, ProfiBUS interfaces for remote control and data collection
- Software for managing label printer, barcode and Qrcode readers

ACCESSORIES

- Air filters
- Certificated Leak Master to be inserted in the Staubli® connector
- Barcode, Qrcode readers and printer
- Remote control keypad
- 3-colours indicator light with loud sound alert

DIMENSIONS



CUSTOMIZED SOFTWARE PROGRAMS

- LAN jServer interface to collect and manage datas
- Parameter programming
- LabVIEW™ drivers for Modbus RTU