



**MARPOSS**  
TECNA

# Delta **TM3PF** and **PQ**

## TESTING MODULES FOR FLOW AND PRESSURE MEASUREMENTS



- Flow measurement  
from 25 cm<sup>3</sup>/min up to 160 l/min
- Resolution up to 0.01 cm<sup>3</sup>/min
- Pressure fs up to 10 bar
- Resolution up to 1 Pa
- Digital I/O interfaces for PLC connection
- USB/RS485 for programming and for data collection
- Software Manager: equipment management, data collection, statistical process



## DESCRIPTION

TM3PF and PQ lines have digital I/O interfaces for PLC connection, USB/RS485 for programming and for data collection, a software to collect and manage the tests data for PC.

These instruments can be connected and controlled by every PLC and interfaced to HMI terminal which is provided with serial lines, USB host and Ethernet interface.

The Software Manager makes it possible to collect and manage tests data, to set up the parameters, programming and do SPC analysis of tests data.

### TM3PF

The instrument directly measures pressure and flow rate through the product being tested (filters, taps, valves, ...).

Dislocated pressure reading on the tested product is available.

### TM3PF-CV

The instrument measures the peak pressure reached before the opening of the valve and also the pressure and the residual flow when the valve opens. Before the test starts, the testing module checks the initial conditions of pressure and free output flow.

### TM3PQ

By using an internal volume, the instrument can measure the leak rate and also control the volume of the tested product.

TEST

## DELTA TM3 can be interfaced with:



• SOFTWARE MANAGER

• Traditional PLC systems

• HMI with dedicated software

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Rev 05/23

## SPECIFICATIONS

DC Power Supply	24Vcc $\pm$ 10 %, 1.5 A
Compressed Air Line	Unlubricated, filtered (5 $\mu$ m) and dry air compliant with Standard ISO 8573-1
Sensor Calibration	Remote control software procedure
Pressure Regulator	External, optional
Indicators	4 LEDs: two yellow (test phases), green (passed), red (failed)
Counters	Test counters: PASSED and FAILED totals, resettable to zero Life counters
Programmable parameters	99 testing tables, general testing parameters
Digital IO	2 (+ 3 optional) not programmable Input , 24 Vcc, 0.7 A max 4 not programmable Output , 24 Vcc, 0.7 A max
USB	1 port USB-Device for computer interface
Serial	1 port RS485 , 3 pin, terminal block + 1 port RS485/RS232, binder (Optional)
Protocols	CSV (ASCII) Modbus RTU
Staubli® Connector	Available on external connection for leak masters (option)
Housing	Unpainted anodized aluminium

## CALIBRATION SERVICE

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

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

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

## ACCESSORIES

- Pressure and flow regulators
- External module for vacuum generation
- Air filters
- Fixing brackets
- Staubli® connector assembled on a T fitting to join a Leak Master

## SOFTWARE MANAGER

- Software to collect and manage the data of the tests
- Viewing, programming, management of single or multiple testing stations
- Backup and Restore archive test table
- Barcode/Qrcode/Datamatrix
- Virtual Instrument for National Instruments LabVIEW™ available at request

## HMI TERMINAL

HMI Weintek operator terminal with touchscreen display.

Preloaded software to manage up to 8 TM3P instruments.

Libraries for other PLCs and HMI viewers are available upon request.

Barcode/Qrcode/Datamatrix and Printer management

## DIMENSIONS

