TCR TECORA
POLLUTION CHECK

OUTDOOR
AIR QUALITY

Multifunction Calibrator

FLOWCAL X

TXT format

Flowcal X, more than a simple flow calibrator...

A single instrument allows to perform all necessary controls to verify the calibration of some parameters, which are normally measured by sampler, **like flowrate, pressure and temperature.**

This characteristic makes **Flowcal X** unique to test the accuracy of an instrument and to follow a quality system procedure.

MEASUREMENT TRACEABILITY

This is very important to follow a quality system procedure. **Flowcal X** generates a **calibration report**, containing the following data: cell in use, calibration expiration date, ambient conditions during verification test, deviations, test date and hour, etc.

It is no longer necessary write paper reports: the reports can be easily downloaded via the Micro-USB port, eliminating the need for outdated serial ports or converters.

Data transfer is quick and straightforward by simply **connecting the device to a computer.**

Sensor and measurement calibration have been performed with high accuracy and care.

Each sensor is calibrated through **an accurate procedure and is traceable to standards.**

Each instrument is supplied with **a calibration certificate.**

MAIN FEATURES

- Reference calibrator to measure:
  - Flow;
  - Absolute Pressure;
  - Differential Pressure;
  - Temperature (optional);
- Flow calibrator with Interchangeable measurement cells Flowcell Air, available in different ranges;
- High precision pressure calibrator, with thermal drift compensation device;
- Creation of calibration report;
- Creation of measurement log directly on the USB Key;
- Powered by a rechargeable Li-Ion battery;
- Long battery life;
- Available with ISO 17025 accredited laboratory certificate.

INNOVATION MADE IN ITALY

FLOWRATE CELLS FLOWCAL X

The flow measurement cells are **equipped with an internal microchip that stores all calibration and verification data**.

Operation is extremely simple: just connect the cell to the instrument and power it on. The system automatically recognizes the cell, making it immediately ready for flow measurement.

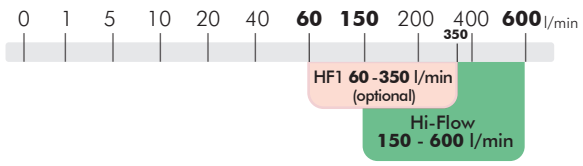
Each cell integrates an **ambient temperature sensor**, shielded from solar radiation for reliable outdoor use.
The calibration data of the temperature sensor is also stored directly on the cell's chip, ensuring accurate and consistent measurements.

The **cell connections are fully compatible with European LVS and US EPA standards** for sampling heads.
Flow values can be displayed under both actual conditions and standard conditions.

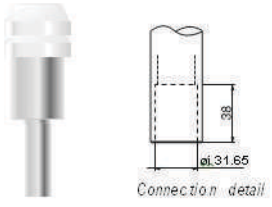
Finally, **Flowcal X is fully compatible with all legacy TCR Tecora® flow cells, ensuring continuity and long-term usability.**

MODELS AND FEATURES

Hi-Flow Venturi

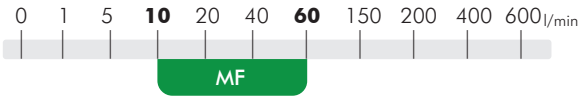


Range	**150 - 600 l/min**
Flow measurement accuracy	1% f.s.
Cell Material	Anodized aluminum
Built-in Temp. Sensor accuracy	Better than 1% ±0.2 °C
Working Temperature	-20 +60°C
Connection	Male fitting diam. 31.65mm
Code	
Hosebarb for Hi-Flow cell	**AB99-008-0010SP**
	AB99-008-9910SP



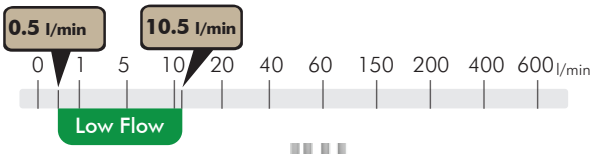
MODELS AND FEATURES

MID Flow Venturi

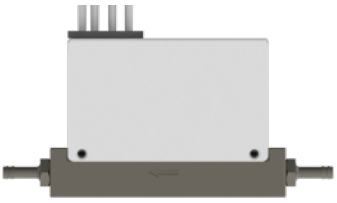


Range	**10 - 60 l/min**
Flow measurement accuracy	1% f.s.
Cell material	Anodized aluminum
Built-in Temp. Sensor accuracy	Better than 1% ± 0.2 °C
Working Temperature	-20 +60°C
Connection	Female fitting diam. 31.75mm
Application	PM10/2.5 samplers, portable and isokinetic samplers
Code	
Hosebarb for MID Flow cell	**AB99-008-0011SP**
	AB99-008-9911SP

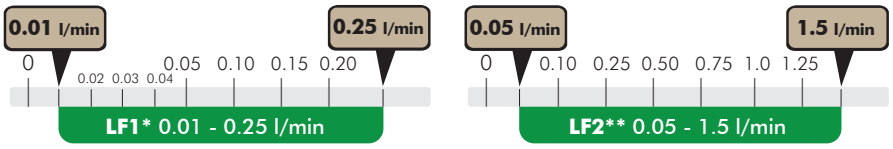
Low Flow
(requires the software release)



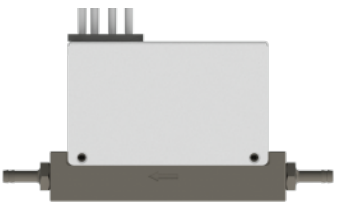
Range	**0.5 - 10.5 l/min**
Flow measurement accuracy	1% f.s.
Cell material	AISI 316 steel
Built-in Temp. Sensor accuracy	Better than 1% ± 0.2 °C
Working Temperature	-20 +60°C
Connection	Threaded hosebarb 1/4" gas
Code	**AB99-008-0012SP**

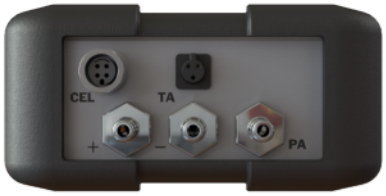


Laminar cell



Flow measurement accuracy	1% f.s.
Cell material	AISI 316 steel
Built-in Temp. Sensor accuracy	Better than 1% ± 0.2 °C
Working Temperature	-20 +60°C
Connection	Threaded hosebarb 1/4" gas
Code *	**AB99-008-0013SP - LF1***
	AB99-008-0014SP - LF2**





TECHNICAL SPECIFICATIONS

Differential Pressure

Range	0-6800 Pa (0-680 mmH2O)
Accuracy	Better than 1% of measure ± 2 Pa
Resolution	0.1 Pa (0.001 mmH_2O)
Differential pressure max	30.000 Pa (3000 mmH_2O)

Absolute Pressure (static and barometric)

Range	0 - 105 kPa
Accuracy	Better than 1% of measure ± 0.1 kPa
Resolution	0.1 kPa (0.1 mBar)

Temperature Probe Input (optional)

Range	–20 + 80°C
Accuracy	0.01°C
Resolution	1% of measure ± 0.2°C

General Specifications

Working temperature	–20 + 40°C
Power supply	Rechargeable Li-Ion battery
Display	3.5" Touch-Screen
USB port	Micro-USB
Weight	400g
Dimensions	H. 175 x L. 90 x P. 50 mm

CODES FOR ORDERS

Flowcal X The equipment includes: →USB Flash disk 1 Gb →Carrying case →User's manual →Calibration certificate →Micro-USB cable	**AB99–008–0000SP**
Optional temp. probe inlet	**AB99–008–0006SP**
External temperature sensor with connection cable	**AB99-008-0020SP**
Protective case	**AC99–004–9900SN**

TCR Call us!
+39 02 3664 8635
info@tcrtecora.com
tcr-tecora.com
Via delle Primule, 16
Cogliate (MB), 20815, Italy