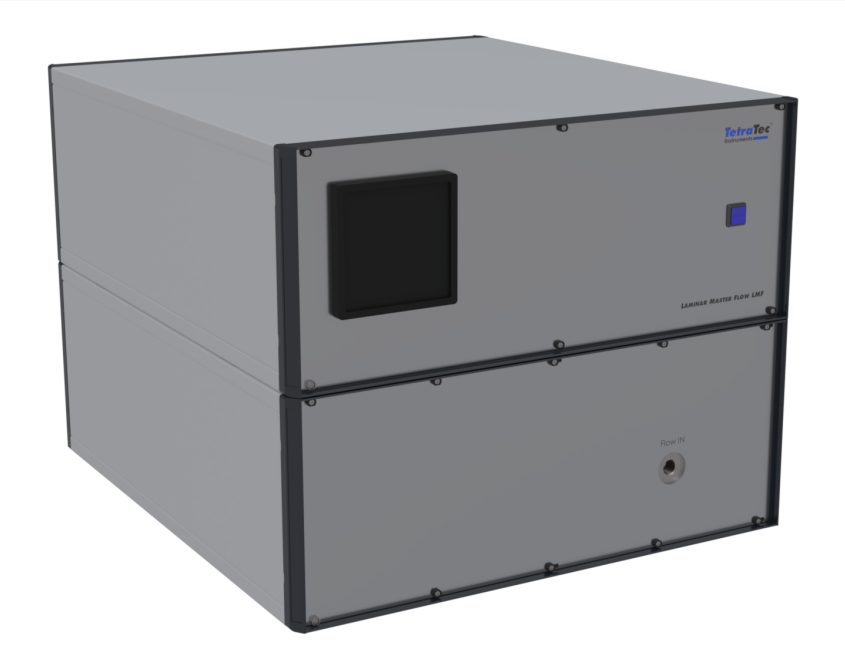
CoM4.Gallery

Technical Datasheet



Short description

Flow measurement system with critical nozzle gallery
The **CoM4.Gallery** is a highly precise **dosing system for generating defined volumetric flows of air and gas** based on critical flow nozzles, in **suction or pressure mode**. The nozzles have a **fixed binary graduation** and are combined into groups of up to **eight nozzles**. Each nozzle has an **optimally designed flow cross-section**, ensuring permanently stable **critical operation**.

Identification

Product Name	CoM4.Gallery
Controller	CoM4.SYS
Document Status	12.11.2026
Enclosure Size	19" 8 U desktop enclosure without handles

Measured variables and calibrated ranges

MEASURAND	UNIT	MIN.	MAX.	MAX. DEVIATION
Flow Rate, Suction Mode[1)]	L/min	approx. 0.005	approx. 35	Accuracy: < 0.1 % rdg. Measurement uncertainty (k=2): ±0.5 % rdg.[2)]
Flow Rate, Pressure Mode[1)]	L/min	approx. 0.012	approx. 200	Accuracy: < 0.15 % rdg. Measurement uncertainty (k=2): ±0.65 % rdg.[2)]
Absolute Pressure, Suction Mode	bar	0.8	1.2	0.01 % FS
Absolute Pressure, Pressure Mode	bar	0.8	7	0.01 % FS
Temperature	°C	0	50	0.15 °C
Humidity	% RH	0	90	3 % RH

rdg. = of reading, FS = full scale. The flow rate varies with atmospheric pressure; these variations are a normal physical effect.
[1)] Lowest and highest flow rate of the design. A single unit covers a turndown of 1:200 within these limits; its position is specified when ordering. Example, suction mode: a unit with 35 L/min as its highest flow rate operates from 0.175 to 35 L/min, one with 5 mL/min as its lowest from 5 mL/min to 1 L/min.
[2)] A lower measurement uncertainty can be achieved on request, where applicable through external calibration at a national metrology institute.

Sensors

SENSOR TYPE	MEASURING RANGE	OVERLOAD
Absolute Pressure Sensor 1	0 to 1.2 bar	2 × max. measuring range
PT100 Temperature Sensor	0 to 75 °C	max. 75 °C
Humidity Sensor	0 to 100 % RH	no wetting with water
Gauge Pressure Sensor 1	-1 to +1 bar	2 × max. measuring range
Gauge Pressure Sensor 2, Pressure Mode	0 to 6 bar	2 × max. measuring range

Operating conditions

Inlet Pressure, Suction Mode	0.8 to 1.2 bar abs.
Inlet Pressure, Pressure Mode	2.5 to 7 bar abs.
Inlet Temperature	0 to 45 °C
Humidity	0 to 100 % RH, non-condensing

Ambient conditions

Temperature	0 to +40 °C
Humidity	0 to 100 % RH, non-condensing
Pressure	atmospheric
Degree of Protection	IP20

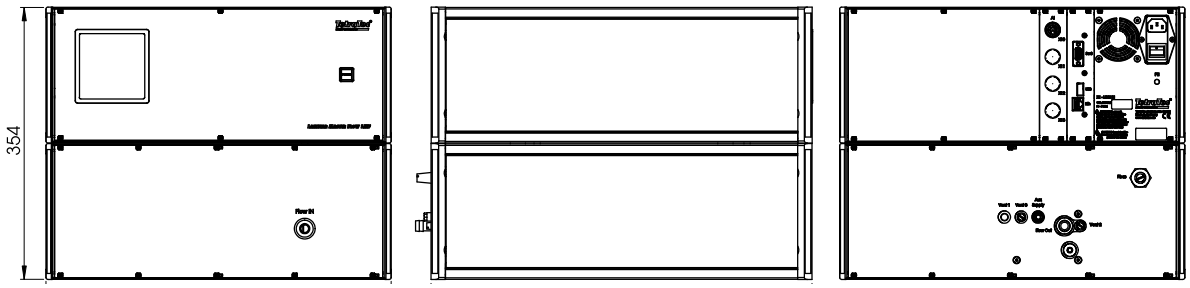
Media compatibility

Permissible Media	Suction mode: ambient atmosphere Pressure mode: compressed air, clean, dry, non-condensing inert, non-flammable gases on request
Purity Requirements	Pressure mode: ISO 8573-1; 5 µm filter + oil/water separator required

Standards and approvals

Standards	EN 61010-1

Mechanical and electrical data



Dimensions in millimetres. Drawing not to scale; binding dimensions on request.

Enclosure	495.5 × 449 × 354 mm
Process Connections	Plastic hoses with 8 mm union nuts
Display	4-inch graphical user interface
Power Supply	90 to 260 VAC / 50/60 Hz
Power Consumption	max. 80 W
El. Connections	IEC power connector

Interfaces

Communication	Ethernet, USB 2.0 (Type A, for updates)

Options and variants

- Enclosure variants: desktop enclosure or rack enclosure (optionally with handles)

Ordering information

The system can be adapted to the requirements of the test task. For design and quotation we need:

- Operating mode (suction or pressure mode)
- Required flow range
- Operating conditions (pressure and temperature)
- Environmental conditions
- Enclosure requirements
- Power supply
- Data acquisition requirements
- Other specific requirements, e.g. measurement uncertainty

FURTHER INFORMATION

Benefits, operating principle and application examples are given in the product brochure **CoM4.Gallery**. To discuss your measuring task, contact us at **+49 7157 5387-0** or **info@tetratec.de**.