CoM4.Leak-ClosedBox

Technical Datasheet



Short description

The Closed-Box leak test system from TetraTec opens up new possibilities wherever small test specimens **cannot be adapted**, **cannot be connected to tubing**, or **cannot be opened**. In the robust, drawer-based test chamber, components can be loaded, tested for leaks, and removed fully automatically – quickly and with high process reliability.

Identification

Product Name	CoM4.Leak-ClosedBox
Controller	CoM4.SYS software on Beckhoff system
Document Status	12.11.2026
Enclosure Size	19" 10 U desktop enclosure without handles

Measured variables and calibrated ranges

MEASURAND	UNIT	MIN	MAX	ACCURACY
Leakage	mL/min	0.1	5	Accuracy: < 0.5 % rdg. Measurement uncertainty (k=2): < 1.0 % rdg.
Gauge Pressure	bar	0.1	7	0.01 % FS
Temperature	°C	0	50	0.15 °C

rdg. = of reading, FS = full scale. The calibrated ranges apply to air.

Sensors

SENSOR TYPE	MEASURING RANGE	OVERLOAD
Gauge Pressure Sensor 0	0–16 bar	3 × max. measuring range
PT100 Temperature Sensor	0–75 °C	max. 75 °C
Gauge Pressure Sensor 1	0–10 bar	12 bar
Differential Pressure Sensor	-20–20 mbar	2 × max. measuring range

Operating conditions

Inlet Pressure	max. 10 bar
Inlet Temperature	0–50 °C
Humidity	0–100 % non-condensing

Ambient conditions

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

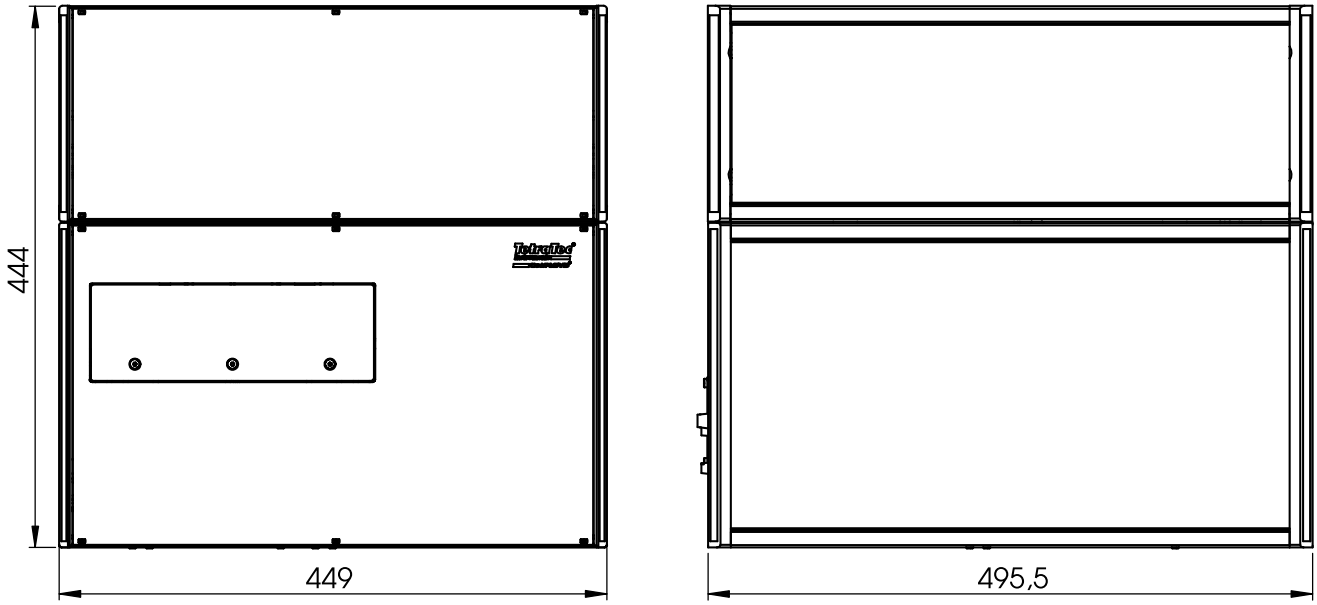
Media compatibility

Permissible Media	Clean, dry, non-condensing air
Purity Requirements	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 × 444 mm
Process Connections	Output drawer for test specimen placement
Display	external monitor with Beckhoff HMI
Power Supply	90–260 VAC / 50/60 Hz
Power Consumption	max. 80 W
El. Connections	IEC connector
Weight	28 kg

Interfaces

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

Options and variants

- Enclosure variants: desktop enclosure or rack enclosure (if applicable, also with handles)
- Integration of the mechanics into the production line

Ordering information

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

- Target leakage rate
- Test volume
- Operating conditions (pressure and temperature)
- Control requirements
- Ambient conditions
- Enclosure requirements
- Power supply
- Data acquisition requirements
- Other specific requirements

FURTHER INFORMATION

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