

PRODUCT TECHNICAL BRIEF

BG.63.002.00.000 Calibrated Reference Leak

The BG.63.002.00.000 calibrated reference leak is intended for setting up leak-detection equipment and quantitatively evaluating leakage during leak-tightness testing.

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Technical and Project Information

The capillary reference leak is used to set up leak-detection equipment and quantitatively evaluate leakage during leak-tightness testing.

Its operating principle is based on tracer gas flowing through a glass capillary.

The reference leak consists of a body that serves as a tracer-gas reservoir and a capped charging valve used to fill the device. Depending on the version, it also has either a 10 mm connection tube for attaching the leak to the system under test (Version 1) or a scale for measuring leak-detector probe travel speed and leakage (Version 2).

The connection tube can be modified to customer requirements. The charging valve has a nipple fitting with an M16 × 1.5 thread.

Each reference-leak type has its own characteristics and intended use.

- Reference leak, Versions 1 and 2 Designations: Version 1 - BG.63.002.00.000-1; Version 2 - BG.63.002.00.000-2.
Tracer-gas flow range: Version 1 - 1.33×10^{-8} to $1.33 \times 10^{-5} \text{ Pa} \cdot \text{m}^3 / \text{s}$; Version 2 - 6.67×10^{-8} to $1.33 \times 10^{-5} \text{ Pa} \cdot \text{m}^3 / \text{s}$. Maximum dimensions: Version 1 - 280 × 90 × 50 mm; Version 2 - 235 × 90 × 55 mm. Calibration interval: 3 to 12 months.

Reference leak, Versions 1 and 2

- Designations: Version 1 - BG.63.002.00.000-1; Version 2 - BG.63.002.00.000-2.
- Tracer-gas flow range: Version 1 - 1.33×10^{-8} to $1.33 \times 10^{-5} \text{ Pa} \cdot \text{m}^3 / \text{s}$; Version 2 - 6.67×10^{-8} to $1.33 \times 10^{-5} \text{ Pa} \cdot \text{m}^3 / \text{s}$.
- Maximum dimensions: Version 1 - 280 × 90 × 50 mm; Version 2 - 235 × 90 × 55 mm.
- Calibration interval: 3 to 12 months.
- Reference leak with pressure gauge, Versions 1 and 2 Designations: Version 1 - BG.63.002.00.000-3; Version 2 - BG.63.002.00.000-4. Flow range for both versions: 1.33×10^{-7} to $1.33 \times 10^{-4} \text{ Pa} \cdot \text{m}^3 / \text{s}$. Maximum dimensions: Version 1 - 280 × 90 × 110 mm; Version 2 - 235 × 90 × 110 mm. Calibration interval: 12 to 24 months.

Reference leak with pressure gauge, Versions 1 and 2

- Designations: Version 1 - BG.63.002.00.000-3; Version 2 - BG.63.002.00.000-4.
- Flow range for both versions: 1.33×10^{-7} to $1.33 \times 10^{-4} \text{ Pa} \cdot \text{m}^3 / \text{s}$.

- Maximum dimensions: Version 1 - 280 × 90 × 110 mm; Version 2 - 235 × 90 × 110 mm.
- Calibration interval: 12 to 24 months.
- Reference leak with valve, Versions 1 and 2 Designations: Version 1 - BG.63.002.00.000-5; Version 2 - BG.63.002.00.000-6. Flow range: the same as for the versions with a pressure gauge, 1.33×10^{-7} to 1.33×10^{-4} Pa·m³/s. Maximum dimensions: Version 1 - 325 × 90 × 110 mm; Version 2 - 285 × 90 × 110 mm. Calibration interval: 6 to 12 months.

Reference leak with valve, Versions 1 and 2

- Designations: Version 1 - BG.63.002.00.000-5; Version 2 - BG.63.002.00.000-6.
- Flow range: the same as for the versions with a pressure gauge, 1.33×10^{-7} to 1.33×10^{-4} Pa·m³/s.
- Maximum dimensions: Version 1 - 325 × 90 × 110 mm; Version 2 - 285 × 90 × 110 mm.
- Calibration interval: 6 to 12 months.

Specifications Common to All Reference-Leak Types

- Tracer gas: helium, sulfur hexafluoride, nitrogen, argon and other non-corrosive gases, including refrigerants.
- Relative flow deviation: ±30%.
- Tracer-gas operating pressure: 0.1 to 1.0 MPa.

The available versions cover different operating conditions and measurement requirements, allowing an appropriate configuration to be selected for a particular leak-testing task.

- Helium Reference Leaks Capillary Helium Reference Leaks Gelit Reference Leaks Reference Leaks for Pfeiffer and Adixen ASM Detectors
- Capillary Helium Reference Leaks
- Gelit Reference Leaks
- Reference Leaks for Pfeiffer and Adixen ASM Detectors
- Scanning Electron Microscopes
- Leak-Detector Accessories

WORLDWIDE PROJECT CONTACT

Send the test object or system, operating conditions, target sensitivity or pressure range, applicable standard, destination country, quantity and schedule. LeakLab will review the project scope.

mail@leaklab.org

Regarding: BG.63.002.00.000 Calibrated Reference Leak

Specifications, standards, verification scope, availability and commercial terms must be confirmed for the exact configuration and destination jurisdiction before order or project acceptance.