

Calibration Gas Regulators Cylinders

UNISERVICE



Calibration Gas Mixtures Regulators & Cylinders

Uniservice Unisafe is your trusted partner for safety in maritime and industrial sectors. We specialize in gas detector calibration and supply high-quality span gas cylinders and regulators, ensuring the safety of your team and assets.

Gas Detector Calibration Experts

Our experienced professionals guarantee the accuracy and reliability of your gas detectors. From routine calibration to sensor replacement, we ensure your detectors perform flawlessly, keeping your team safe from hazardous gases. We offer a wide range of gas mixtures for calibrating Marine gas detection systems. These mixtures are tailored to various applications, including Inert Gas Systems, protection of Water Ballast Tanks/Pump Rooms, Accommodation Rooms and Scrubber Systems.

Span Gas Cylinders and Regulators

Choose from our extensive range of calibration gases for various applications, including toxic gases like Hydrogen Sulfide (H₂S), flammable gases like Methane (CH₄), Benzene in ppm, and Isobutylene for calibrating PID Sensors (10.6eV and 10.0eV lamps). Our precise mixtures guarantee effective calibrations, and our compliant regulators ensure the proper gas flow.

Compliance and Quality Assurance

We take regulatory standards seriously. Our RINA Service Suppliers Approval for calibration of fixed and portable gas detection equipment, including the issuance of a Certificate of Calibration, ensures strict adherence to international standards. Count on us to keep your equipment and processes compliant with industry regulations.

Customer-Centric Approach

Your satisfaction is our priority. Our dedicated customer support is ready to assist with calibration procedures, technical inquiries, or custom solutions.

Your Safety, Our Commitment

Safeguard lives and assets from gas-related risks with Uniservice Unisafe. We're your trusted name in safety.

Contact us today for gas detector calibration, including tailored and reliable gas equipment supplies, including customized calibration gas mixtures, to meet your specific needs.

✉ info@uniservicesafety.com

Functional Device Testing
Sensors Replacement
Calibration
Datalogging

Cylinders

Model	Liters	h mm	ø mm	psig	bar	Gas Mixtures
2 AL	34	289	76	500	35.5	Non-Reactive
10 ALU	116	362	90	1,000	69	Non-Reactive
5 AL	750	505	150	2,175	150	Non-Reactive
10 AL	1,500	690	150	2,175	150	Non-Reactive
10 ST	1,500	690	160	2,175	150	Reactive, Non-Reactive

We supply Non-Refillable Cylinders from 34 to 1500 Liters of Gas Capacity.

34 and 116 liter calibration gas capacity aluminum cylinders for non-reactive specialty gases including Zero & Pure Grade Gases as well as gas mixtures

of Carbon Dioxide, Carbon Monoxide, Hydrocarbon and LEL standards, Hydrogen, Nitrous Oxide and Oxygen.

34, 116 and 750 liter gas capacity aluminum cylinder for low level and reactive gas mixtures including Ammonia, BTXE, Ethylene Oxide, Hydrogen

Sulfide, Nitric Oxide, Nitrogen Dioxide, Benzene, Isobutylene and Sulfur Dioxide.

1500 Liters size specialty gas capacity steel cylinder for flammable calibration mixes including BTU and RGA standards.



Regulators

Model	Description
700 Series	Single-stage preset fixed flow rate regulator. Available in Brass, hybrid Stainless Steel/Aluminium or Stainless Steel versions.
1000 Series	High pressure dual-stage regulator offers a high degree of accuracy and control.
2000 Series	Demand-flow regulators designed for use with pumped instruments.
4200 Series	Trigger regulators designed to provide aerosol capability.
Accessories	Range of carry cases, tubings and specialised equipment.



Gas Mixtures

When it comes to the calibration of gas detectors, precision is non-negotiable. Uniservice Unisafe is your trusted supplier of **specialized span gas mixtures** designed for both non-reactive and reactive gases. Our commitment to accuracy ensures that your gas detectors perform flawlessly, keeping your workplace and personnel safe.

Reactive Gases Calibration

1. **Hydrogen Sulfide** (H₂S): Calibration of detectors for H₂S is crucial for safety in industries such as oil and gas, where this highly flammable and extremely toxic gas is commonly encountered. Ensuring precise detector calibration is paramount in safeguarding the well-being of personnel and preventing potentially catastrophic incidents caused by H₂S exposure.

2. **Sulfur Dioxide** (SO₂): Vessel fuel oil often contains a relatively high sulfur content compared to other fuel types, and this sulfur is emitted as sulfur dioxide in the ship's exhaust gas.

3. **Chlorine** (Cl₂): Accurate calibration of Cl₂ detectors is essential, particularly in water treatment plants and chemical industries. The pungent odor resembling household bleach should not be ignored, as it often serves as a tell-tale sign of potential issues at your facility.

4. **Hydrochloric Acid** (HCl): Given the widespread use of hydrogen chloride, the need for equipment

that monitors its emissions is crucial for the safety of industrial workers. Accurate calibration of air quality monitoring equipment used to measure HCl gas is paramount to ensure safety and compliance.

5. **Ammonia** (NH₃): NH₃ detection is critical in maritime refrigeration and when transporting fertilizers, ensuring the safety of cargo and crew.

6. **Phosphine** (PH₃): PH₃ detection is essential in maritime environments where it can naturally occur in anaerobic conditions through the decomposition of organic materials containing phosphorus. Additionally, it's crucial when transporting goods prone to infestation, preventing harmful exposure to crew and cargo.

7. **Benzene** (C₆H₆): Benzene is often used as a calibration gas for the testing and calibration of gas detection systems, particularly those equipped with PID (Photoionization Detector) sensors. PID sensors are sensitive to a wide range of volatile organic compounds, including benzene.

8. **Isobutylene** (C₄H₈): Isobutylene serves as a vital calibration gas for detectors specifically designed to identify reactive gases. This is particularly significant in confined space entry scenarios, where the presence of combustible or toxic gases can pose substantial risks. Calibrating with isobutylene enhances detector precision and safety for maritime personnel in confined spaces and hazardous environments.

9. **Silane** (SiH₄): Detection of SiH₄ is crucial

because this gas poses a significant danger when transported, particularly on maritime vessels. Several fatal industrial accidents resulting from the combustion and detonation of leaked silane in the presence of air have been reported.

Non-Reactive Gases Calibration

1. **Nitrogen** (N₂): Nitrogen is essential in calibration gas mixtures, serving as a non-reactive filler gas, frequently blended with other gases during the preparation of calibration cylinders.

2. **Carbon Dioxide** (CO₂): Carbon Dioxide is encountered in many industrial settings. Our CO₂ span gas mixtures are meticulously prepared to help you calibrate detectors accurately, ensuring the safety of your team.

3. **Argon** (Ar): Argon belongs to the noble gas group, which includes rare gases like helium, krypton, neon, xenon, and occasionally radon. Argon serves as a non-reactive filler gas, commonly blended with other gases during the preparation of calibration cylinders.

Contact us today to discuss your **specific calibration requirements** and benefit from our expertise in gas detection calibration.

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