

## **Technical Datasheet**

# **SCBA Self-Contained Breathing Apparatus**

## Class 1 - Venus SCBA 108

Emergency rescue/response device



**ISI** Approved

SCBA 108-7AC Item # 110350801 Incl. Back plate V08 design, V-777, Analogue Gauge, CC Cylinder with Gauge

SCBA 108-6AC Item # 110350701 Incl. Back plate V08 design, V-666, Analogue Gauge, CC Cylinder without Gauge

## SCBA 108-6AC Item # 110355901 Class 1, Incl. Back plate V08 design, V-666, Analogue Gauge, CC Cylinder with Rotrex Gauge

- Carbon composite light weight Cylinder 6.8 L, 300 bar, Work Life:45 min.
- Pressure reducer valve & cylinder PESO approved
- Set weight (with CC filled cylinder) approx. 10.5 kg.

## SCBA 108-6AS Item # 110356001 Class 1, Incl. Back plate V08 design, V-666, Analogue Gauge, Steel Cylinder

- Steel Cylinder 6.00 L, 300 bar, Work Life :45 min.
- Pressure reducer valve & cylinder PESO approved Set weight (filled steel cylinder) approx. 17 kg.10.5 kg.





## Features of the Venus Class 1 SCBA:

- 1. **Variants and Work Life:** Available in lightweight composite cylinders (6.8 L/7.7 L) and steel cylinders (6.0 L) with or without an analogue gauge, supporting up to 45 minutes of work life at 300 bars.
- 2. **Pressure Regulation and Demand Valve:** Features PESO-approved pressure reducer valves for reliable air regulation. Demand Valve: Allows 360° rotation, providing large airflow for comfortable and unrestricted breathing.
- 3. **Weight and Ergonomic Design:** Lightweight models weigh ~10.5 kg, while steel variants weigh ~17 kg, complemented by an ergonomic backplate for comfort and balance.
- 4. **Face Mask V-666:** Made from neoprene rubber, with an anti-fog, heat-resistant polycarbonate visor tested up to 900°C and compliant with multi-flame burner test standards.
- 5. **Harness Durability:** Constructed with Polyester-FR material and Aramid/CFR, featuring reflective fabric for visibility and stainless steel buckles for durability.
- **6. Analogue Gauge:** Designed to be explosion-proof, dust-proof, and waterproof, with a fluorescent display for visibility in low-light conditions.

## Benefits:

- 1. **Variants and Work Life:** Offers flexibility to suit diverse operational needs while ensuring ample air supply for extended safety.
- 2. **Pressure Regulation and Demand Valve:** Ensures consistent air delivery and ease of movement in critical situations.
- 3. **Weight and Ergonomic Design:** Reduces user fatigue during extended use, enhancing operational efficiency.
- 4. **Face Mask V-666:** Provides clear vision and robust protection in high-heat and hazardous environments.
- 5. Harness Durability: Offers enhanced strength, safety, and comfort during intense operations.
- 6. Analogue Gauge: Reliable monitoring of air pressure for timely decision-making in emergencies.

## **Cautions & Limitations**

- 1. **Fit**: Ensure proper fit to prevent leaks.
- 2. **Training**: Users must be trained.
- 3. **Inspection**: Regularly check for damage and pressure.
- 4. **Temperature**: Avoid extreme temperatures.
- 5. **Storage**: Keep in a cool, dry place.
- 6. **Handling**: Avoid dropping or impacting the cylinder.



## SCBA Class 1 Quick Guide

## 1. Preparation:

a. Inspect SCBA for damage, ensure the cylinder is fully charged, and confirm all components function properly.

#### 2. Donning:

a. Wear the harness, tighten straps, secure the waist belt, and connect the cylinder valve to the regulator.

## Fitting:

a. Position the face-piece snugly on your face, tighten head straps evenly, and check for leaks.

#### 4. Activation:

a. Open the cylinder valve, check the pressure gauge, and ensure no air leaks.

## 5. **Usage**:

a. Inhale to start airflow, monitor the pressure gauge, and adjust airflow as needed.

#### 6. Low-Air Warning:

a. Exit promptly when the low-pressure whistle sounds.

#### 7. **Exit**:

a. Leave the hazardous area before air is depleted or upon task completion.

## 8. **Doffing**:

a. Close the valve, remove the face-piece, loosen straps, and remove the harness.

#### 9. Maintenance:

a. Inspect, clean, dry, and store SCBA properly; recharge the cylinder for future use.

## **Applications of SCBA Class 1**

## 1. Fire-fighting:

Used in fire rescue operations to provide breathable air in smoke-filled environments.

## 2. Hazardous Material Handling:

Protects against toxic gases, vapors, and airborne chemicals in industrial settings.

## 3. Confined Space Entry:

 Essential for operations in oxygen-deficient or contaminated spaces like tanks, tunnels, and sewers.

## 4. Emergency Rescue:

Supports rescue teams during natural disasters, explosions, or hazardous spills.

## 5. Mining and Construction:

• Ensures safety in environments with dust, gas leaks, or poor ventilation.

## 6. Chemical and Petrochemical Industries:

o Provides respiratory protection during maintenance, accidents, or chemical handling.

SCBA Class 1 is critical for environments where clean air is necessary for survival and safety.