

ICS 13.220.01
CCS C84



**NATIONAL STANDARD OF THE
PEOPLE'S REPUBLIC OF CHINA**

GB 46994-2025

**Fire emergency rescue equipments - Lifting bag systems for
fire and rescue service use**

消防应急救援装备 救援起重气垫

Issued on: December 31, 2025

Implemented on: January 1, 2027

**Issued by: State Administration for Market Regulation;
Standardization Administration of China**

Table of Contents

1.Scope	1
2 Normative References	1
1 Model 4	2
5.Technical Requirements	3
5.1 Appearance Quality	3
5.2 External Dimensions of the Mat Body	3
5.3 Lifting Capacity	3
5.4 Inflation and deflation time	3
5.5 Aging resistance	3
5.6 Oil resistance	3
5.7 High and low temperature resistance	3
5.8 Air tightness performance	3
5.9 Pressure resistance	4
5.10 Puncture resistance	4
5.11 Reliability	4
5.12 Salt spray corrosion resistance	4
5.13 Gas Cylinder	4
5.14 Gas Cylinder Valve	4
5.15 Pressure Reducer	4
5.16 Controller	4
5.17 Safety Valve	4
5.18 Gas delivery hose	4
5.19 Quick-connect coupling	4
5.20 Pressure gauge	4
6.Test Methods	5
6.1 Appearance Quality Inspection	5
6.2 Measurement of the outer dimensions of the pad	5
6.3 Lifting Capacity Test	5
6.4 Measurement of inflation and deflation time	5
6.5 Aging resistance test	5
6.6 Oil resistance test	5
6.7 High and Low Temperature Resistance Test	5

6.8 Air tightness test	5
6.9 Pressure resistance test	5
6.10 Puncture resistance test	6
6.11 Reliability Testing	6
6.12 Salt spray corrosion resistance test	6
6.13 Gas Cylinder Test	6
6.14 Gas Cylinder Valve Test	6
6.15 Pressure Reducer Inspection and Performance Testing	6
6.16 Controller Inspection	6
6.17 Safety Valve Performance Test	6
6.18 Gas transmission hose test	7
6.19 Quick-connect coupling inspection and testing	7
6.20 Pressure gauge test	7
7 Inspection Rules	7
7.1 Factory Inspection	7
7.2 Type Testing	7
8.1 Mark	7
8.2 Packaging	8
8.3 Transportation	8
8.4 Storage	8

Foreword

This document complies with the provisions of GB/T 1.1-2020 "Standardization Work Guidelines Part

1. Structure and Drafting Rules of Standardization Documents". Drafting. Please note that some content in this document may involve patents. The issuing organization of this document assumes no responsibility for identifying patents. This document was proposed and is under the jurisdiction of the State Fire and Rescue Administration. Fire emergency rescue equipment rescue lifting air cushion

1 Scope

GB 46994-2025 is the Chinese national standard on fire emergency rescue equipments - lifting bag systems for fire and rescue service use, in the field of environment and health protection, safety. It carries no /T suffix, which in the Chinese system means compliance is mandatory: a product or a practice within its scope has to meet it to be lawfully made, sold

or carried out in China. It was issued on 31 December 2025 by the State Administration for Market Regulation; Standardization Administration of China, and takes effect on 1 January 2027. Classification: ICS 13.220.01, CCS C84. This page is published from the official record of the standard held by the Chinese standards administration: the identification, the dates, the classification and the issuing body are taken from there. The clause text, the tables and the numeric limits are in the document itself, which is delivered complete in English translation.

This document defines the terminology and definitions of rescue lifting air cushions in fire emergency rescue equipment, and specifies the models, technical requirements, and inspection rules. The corresponding test methods are described, including those for marking, packaging, transportation, and storage. This document applies to the design, manufacture, and inspection of rescue lifting air cushions (hereinafter referred to as "lifting air cushions") used in fire emergency rescue operations.

2 Normative references

The contents of the following documents, through normative references within the text, constitute essential provisions of this document. Dated citations are not included. For references to documents, only the version corresponding to that date applies to this document; for undated references, the latest version (including all amendments) applies. This document.

GB/T 1226 General Pressure Gauges

GB/T 3512 Accelerated aging and heat resistance test of vulcanized rubber or thermoplastic rubber in hot air

GB/T 10125 Corrosion test under artificial atmosphere - Salt spray test

GB/T 22076 Pneumatic Cylindrical Quick-Connect Coupling

GB/T 28053 Aluminum Alloy Liner Carbon Fiber Fully Wound Gas Cylinder

GB/T 34527 Technical requirements for cylinder valves for air respirators

3 Terms and Definitions

The following terms and definitions apply to this document.

3.1 Rescue equipment that uses compressed air to inflate the pad, thereby generating lift to lift heavy objects.

Note. It typically consists of a gas source (such as a gas cylinder and gas cylinder valve), a pressure reducer, a controller, a cushion, and a gas delivery hose (see Figure 1). Index number explanation. 1

- Gas source; 2
- Pressure reducer; 3
- Pressure gauge; 4
- Gas delivery hose; 5
- Safety valve; 6
- Controller; 7
- Material. Figure

chinastandards.org · PREVIEW