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

GB 27898.1-2011

**Fixed water supply equipment used for fire-protection - Part 1:
Gas pressure fixed water supply equipment used for
fire-protection**

固定消防给水设备 第1部分：消防气压给水设备

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Foreword

GB 27898 of this Section 5, Chapter 7 and Chapter 8 are mandatory, the rest are recommended. GB 27898 "fixed fire water supply equipment" is divided into the following sections.

- Part 1. fire pressure water supply equipment;
- Part 2. Fire automatic constant pressure water supply equipment;
- Part 3. Fire booster regulator water supply equipment;
- Part 4. Fire gas top pressure water supply equipment;
- Part 5. Fire dual power supply equipment. This section GB Part of 127,898. This section drafted in accordance with GB/T 1.1-2009 given rules. This section presents the People's Republic of China Ministry of Public Security. This part of the National Standardization Technical Committee fixed fire extinguishing system Technical Committee (SAC/TC113/SC2) centralized. This section is drafted. Tianjin Fire Research Institute of Ministry of Public Security. The main drafters of this section. Zhao Yongshun, Liu Lianxi, Zhang Qiang, Luozong Jun, Sheng Yanfeng, high Hun Sen, Li Xi Min, Chen Jian Ming. This section is the first release. Fixed fire water supply equipment Part 1. Fire pressure water supply equipment

1 Scope

GB 27898.1-2011 is the Chinese national standard on fixed water supply equipment used for fire-protection - part 1: gas pressure fixed water supply equipment used for fire-protection, 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 30 December 2011 by the General Administration of Quality Supervision, Inspection and Quarantine of the People's Republic of China; Standardization Administration of China, and has been in force since 1 June 2012. Classification: ICS 13.220.10, 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 section GB 27898 specifies the terms and definitions fire pressure water supply equipment, classification, requirements, test methods, inspection rules, marking Licensing and operating instructions, packaging, transportation and storage. This section applies to fire pressure water supply equipment. Similar works can refer to the use of pressure water supply equipment.

2 Normative references

The following documents for the application of this document is essential. For dated references, only the dated version suitable for use herein Member. For undated references, the latest edition (including any amendments) applies to this document.

GB 150 steel pressure vessels

GB/T 528 Determination of vulcanized rubber or thermoplastic rubber tensile stress-strain properties

GB/T 3047.1 height of 20mm hex panels, rack and cabinets Series of basic dimensions Description

GB/T 3222.2 acoustic environment noise measurement and evaluation Part 2. Determination of environmental noise levels

GB/T 3797 Electric Control Equipment

GB 4208 housing protection (IP Code) Section 7

GB 5135.7 sprinkler systems. water flow indicator Part 10

GB 5135.10 sprinkler systems. pressure switch GB 6245 fire pump

GB 7251.1 Low-voltage switchgear and control equipment Part 1. Type - tested and partially type-tested assemblies CJ/T 160 double check valve backflow preventer Safety Technology Supervision TSGR0004 Stationary Pressure Vessels

3 Terms and Definitions

The following terms and definitions apply to this document.

3.1 Fixed fire water supply equipment fixedwatersupplyequipmentusedforfire-protection Permanently installed in a building, water fire extinguishing system according to need to configure the components, according to pre-set the fire water supply work sets General apparatus.

3.2 Fire pressure water supply equipment gaspressurefixedwatersupplyequipmentusedforfire-protection To the pressure tank as the core components, fire control network according to set pressure continued supply of fixed fire water supply equipment.

3.3 Emergency type fire pressure water supply equipment emergencytypegaspressurefixedwatersupplyequipmentwithoutfire pumpusedforfire-protection Rely on effective volume of water discharged from the pressure tank to meet the initial fire water pressure water supply equipment, the device is not set fire pump.

3.4 Supercharged fire pressure water supply equipment

pressurization type gas pressure fixed water supply equipment with fire pump used for fire-protection. Additional fire pump on the basis of the emergency type fire pressure water supply equipment, the case status can be pressurized water fire pressure water supply equipment.

3.5 Pressure tank water tank with pressurized gas. Water and gas can be stored and in accordance with Boyle's law work, using a pressure vessel after the gas compression expansion characteristics of the water supply.

3.6 Gas installations pressurized gas shut-off unit stop. Prevent escape of gas from the pressure tank to the water distribution network, maintaining the system working devices.

3.7 Pressure regulator cap p_4 upper limit of stabilizing pressure. Fixed fire water supply equipment to maintain the highest pressure regulator normal operation, the air pressure inside the tank when the water stops.

3.8 Regulator pressure limit p_3 lower limit of stabilizing pressure. Fixed fire water supply equipment to maintain minimum pressure regulator normal operation, when the air pressure inside the tank began to water.

3.9 Only gas/air pressure p_1 gas supply pressure set point. Operating pressure or capsule pressure tank pressure tank q_i formula between device stop gas canister or capsule inflation pressure.

3.10 Effective water volume V_3 effective water volume for fire protection. Provided by the pressure tank, the system can meet the most negative point of initial water pressure fire water. The lower limit is usually regulated pressure from p

3 To stop the gas/air pressure p_1 amount of water discharged from the pressure tank.

3.11 Makeup water volume V_1 usable water volume for fire protection. Fixed fire water supply equipment during normal operation, corresponding to the pressure tank inner pressure between the regulator and the regulated pressure upper limit p_3 p

4 The difference between the volume of water. That avoid equipment Regulators pump start and stop frequently work to maintain a stable pressure fire water supply network regulating water volume.

4.1 Categories

4.1.1 Are there fire pumps are divided into.

--- Emergency type fire pressure water supply equipment, feature code J;

--- Supercharged fire pressure water supply equipment, features Code Z.

4.1.2 pressure tank by forms of work is divided into.