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

GB 27898.2-2011

**Fixed water supply equipment used for fire-protection - Part 2:
Constant pressure automatic water supply equipment used for
fire-protection**

固定消防给水设备 第2部分：消防自动恒压给水设备

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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 27898 Part 2. 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 responsible for drafting unit. Ministry of Public Security in Tianjin Fire Research Institute. Participated in the drafting of this section. Shaanxi Aerospace Power High-tech Co., Ltd. The main drafters of this section. sip Fengying, Zhao Yongshun, Sheng Yanfeng, Ma Jianming, Malacca, Han Wei Zhao, Yan Ru. This section is the first release. Fixed fire water supply equipment Part 2. Fire automatic constant pressure water supply equipment

1 Scope

Part 2 of China's mandatory series on fixed fire water supply equipment, covering the automatic constant pressure sets - the packaged pump, vessel and control assembly that holds a sprinkler or hydrant main at a set pressure and starts, stages and stops its pumps on its own to keep it there as the demand changes. It gives the terms and definitions, the classification, the requirements, the test methods, the inspection rules, and the provisions on marking, operating instructions, packaging, transport and storage, and it applies to fire-fighting automatic constant pressure water supply equipment; similar constant pressure water supply equipment may apply it by reference. Clause 5, clause 7 and clause 8 are mandatory and the remainder is recommended. The requirements are set partly by reference: the fire pump to GB 6245, the pressure vessel to GB 150 and to the TSG R0004 supervision rules for stationary pressure vessels, the drive and control device to the fire service rule GA 61, and the noise measurement to GB/T 3222.2, while Part 1 of the same

series, GB 27898.1-2011, carries the provisions common to the family. GB 27898 is published in five parts: pneumatic type, automatic constant pressure type, pressure boosting and stabilizing type, gas pressurised type, and dual power supply type. Issued on 30 December 2011 and in force since 1 June 2012, it is a first edition, proposed by the Ministry of Public Security, held by SAC/TC 113/SC 2 and drafted by the Tianjin Fire Research Institute.

55 Fire start time/s < 25 < 40 < 55

5.4.3 fire precision pressure control

5.4.3.1 using the control deviation fire way to achieve constant pressure water supply equipment, fire rated working pressure p_x and the measured pressure and for Different pressure disturbances measured repeatability deviation should not exceed 0.02MPa.

5.4.3.2 constant pressure fire pump equipment, fire pumps from zero flow to the fire rated working flow Q_x process of change, pressure change Of fire should not exceed the rated working pressure p_x 10%.

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 Description

GB/T 3222.2 acoustic environment noise measurement and evaluation Part 2.

Determination of environmental noise levels GB 6245 fire pump

GB 27898.1-2011 fixed fire water supply equipment - Part 1. Fire pressure water supply equipment GA61 fixed fire extinguishing system drive, control devices General Safety Technology Supervision TSGR0004 Stationary Pressure Vessels

3 Terms and Definitions

GB 27898.1-2011 define the following terms and definitions apply to this document.

3.1 Fire automatic constant pressure water supply equipment
constantpressureautomaticwatersupplyequipmentusedforfire-protection The use of specific control or the use of pump flow pressure inherent characteristics to achieve constant pressure water supply of fire-fighting equipment.

3.2 Fire constant pressure water supply constantpressurewatersupplyusedforfire-protection
In the course of the fire water supply, water flow in the device does not exceed the range of fire rated water flow changes, the water pressure is always maintained In the set pressure water supply mode. Category 4

4.1 Categories

4.1.1 Equipment by application range is divided into.

- a) fire control automatic constant pressure water supply equipment, features of the code are omitted;
- b) Fire and Life (production) share the automatic constant pressure water supply equipment, feature code G.

4.1.2 Press the fire pump control device is divided into.

- a) automatic fire frequency constant pressure water supply equipment is divided into.

--- Constant pump automatic constant pressure water supply equipment, features, code-named BZ;

--- Reflux automatic pressure control water supply equipment constant pressure, characterized codenamed HL.

- b) Fire automatic frequency constant pressure water supply equipment, features, code-named BP.

4.2 Model preparation Fire automatic constant pressure water supply equipment model prepared by the following method. Fire automatic constant pressure water supply equipment Classification features of the code (see 4.1) Fire rated working pressure, in units of ten megapascals (MPa x 10) / - Fire rated working flow, in liters per second (L/s) - - Fire Pump station number - - Enterprise custom Example. Equipment Type HBP6/10-3ABC represents ABC type fire special automatic frequency constant pressure water supply equipment, fire rated working pressure of 0.6MPa, eliminate Anti-rated work flow of 10L/s, has three fire pumps.

5.1 Basic parameters

5.1.1 Fire automatic constant pressure water supply equipment (hereinafter referred to as the device) px fire rated working pressure of not less than 0.3MPa. Fire rated working flow

5.1.2 devices Qx not less than 10L/s. Equipment and components constituting 5.2

5.2.1 Equipment constituting

5.2.1.1 equipment should include at least a water pump, pipeline valves and accessories, measurement and control instruments, control cabinet.

5.2.1.2 equipment components should concentrate arrangements should overall compact, neat, and should be easy to maintain and repair.

5.2.1.3 Each component mounting apparatus should be strong, be a reliable link.