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

GB 5135.16-2010

**Automatic sprinkler systems - Part 16: Flexible sprinkler hose
with fittings**

自动喷水灭火系统 第16部分：消防洒水软管

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Foreword

GB 5135 Part 6 of this chapter is mandatory, the rest are recommended. GB 5135 "automatic sprinkler system" has been divided into 21 sections.

- Part 1. Sprinklers;
- Part 2. Wet alarm valves, retard, water alarm;
- Part 3. spray nozzle;
- Part 4. Dry alarm valve;

- Part 5. deluge alarm valve;
- Part 6. General Valve;
- Part 7. flow indicator;
- Part 8. Accelerator;
- Part 9. Early Suppression Fast Response (ESFR) sprinklers;
- Part 10. Pressure Switch;
- Part 11. grooved pipe fittings;
- Part 12. Extending coverage product sprinklers;
- Part 13. Water curtain nozzle;

1 Scope

Part 16 of China's mandatory series on automatic sprinkler systems, covering the flexible sprinkler hose - the braided flexible connection between the branch pipe and the sprinkler head, used above suspended ceilings so that a head can be positioned in a ceiling tile without cutting and rethreading rigid pipe. It has become standard practice in commercial fitting-out, and it introduces a flexible element into a system that is otherwise entirely rigid and expected to last the life of the building. This part specifies the classification and model designation, the requirements, the test methods, the inspection rules, and the marking, packaging, transport and storage of flexible sprinkler hoses with fittings. The requirements follow from what the component is asked to do. It must hold the system pressure permanently without leaking and without creeping, which sets the hydrostatic strength, the burst pressure and the leak tightness. It must not restrict the flow more than the designer has allowed for, which sets the equivalent length that must be declared - the figure the hydraulic calculation of the whole system depends on, and the one a poor product gets wrong. It must keep its position once set, so that the head stays where it was installed rather than drifting out of the tile. And it must survive the environment above a ceiling for decades: the corrosion resistance, the resistance to the vibration and movement of the building, and the endurance under repeated pressure cycling. The bracket and the fittings are treated as part of the product, because the assembly is only as good as the way it is anchored to the ceiling grid. Issued on 26 September 2010 and in force since 1 March 2011.

GB 5135 of the provisions of this part of the sprinkler system fire sprinkler hose classification model designation, requirements, test methods, inspection Rules and signs, packaging, transportation, storage and so on. This section applies to the sprinkler system fire sprinkler hose.

2 Normative references

The following documents contain provisions which, through reference in this Part of GB 5135 constitute provisions of this section. For dated references, All subsequent amendments (not including errata content) or revisions do not apply to this section, however, encouraged to reach an agreement in this section Whether the parties can study the latest versions of these documents. For undated reference documents, the latest versions apply to this section.

GB/T 191 Packaging - Pictorial signs (GB/T 191-2008, ISO 780.1997, MOD)

GB/T 7306 (all parts) 55 ° sealing pipe thread

GB 9969.1 Instructions General Industrial Products

GB/T 14525 corrugated metal hose general technical conditions

3 Terms and Definitions

The following terms and definitions apply to this part of GB 5135.

3.1 Fire sprinkler hose flexible sprinkler hose with fittings Automatic sprinkler system sprinkler terminus of flexible metal hose.

3.2 Rated working pressure rated working pressure Fire sprinkler hose in use state maximum allowable working pressure. Category

4 Press sprinkler hose structure can be divided into.

a) a metal mesh sleeve hose, code-named structure W;

b) No metal sleeve hose, code structure is omitted.

5 model designation

Preparation method is as follows: ZSSR Automatic sprinkler system, the sprinkler hose - / Nominal diameter, mm - - Length, mm Rated working pressure, MPa Structure Code
Example 1. ZSSR25/1000-1.2W represents a nominal diameter of 25mm, a length of 1000mm, rated working pressure 1.2MPa metal nets Sprinklers hose. Example 2. ZSSR20/1200-

1.2 represents a nominal diameter of 20mm, a length of 1200mm, rated working pressure 1.2MPa no metal nets Sprinklers hose.

4 Test flowchart of FIG. 9 signs, instructions

9.1.1 Fire Sprinklers hose body shall have clear and durable signs, including at least.

- a) Product name and model specifications;
- b) manufacturer's name or trademark;
- c) rated working pressure;
- e) minimum bend radius;
- f) the date of manufacture and serial number.

9.1.2 packaging Pictorial marking shall comply with GB/T 191's.

9.2 User's Guide Fire sprinkler hose in their packaging shall be accompanied by manual, operating instructions shall be written in GB 9969.1. Instructions must contain at least the following. product name, specifications, environmental conditions, environmental conditions, storage, production date, Production according to the standard, the necessary technical parameters (minimum bend radius, length, equivalent length, etc.), install the operating instructions and installation diagram, note Matters, producer's name, address and contact information. 10 packaging, transportation and storage

6.1 Appearance quality

6.1.1 Fire Sprinklers hose should be provided with the outer surface of permanent signs, clear signs, which shall comply with the provisions of 9.1.

6.1.2 Fire sprinkler hose fittings and look no machining burrs or damage nets network spent should be evenly distributed, its surface should be smooth, It does not allow folding, distortion and other defects, does not allow off (lack of) silk phenomenon. No metal sleeve surface of the hose does not allow delamination, bubbles, inclusions, Scale, rust, cracks, pits sharp corners, sharp folds and other defects.

6.2 Rated Operating Pressure Rated working pressure of the sprinkler hose should be not less than 1.2MPa.

6.3 Material Fire Sprinklers flexible hose wetted parts in contact with the water should not be lower than the corrosion resistance of austenitic stainless steel material manufacture, gold Genus joints and nets should be used in corrosion-resistant material or treated with preservatives.

6.4 Structure and size

6.4.1 Fire Sprinklers threaded hose connection, shall comply with GB/T 7306's.

6.4.2 Fire Sprinklers end of the hose shall be provided for fixing the component or structure.

6.4.3 Fire Sprinklers hose length limit deviations shall comply with the provisions of GB/T 14525 of.