

ICS 13.220.20

CCS C84



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

GB 12514-2026

Replacing GB 12514.1-2005

Technical specifications for fire couplings

消防接口技术条件

Issued on: January 28, 2026

Implemented on: February 1, 2027

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

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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. This document supersedes GB 12514.1-2005 "Fire Protection Interfaces Part

1.General Technical Requirements for Fire Protection Interfaces" and GB 12514.2- 2006 "Fire Connections Part

2.Types and Basic Parameters of Internal Thread Fire Connections", GB 12514.3-2006 "Fire Connections Part 3" Part

4.Types and Basic Parameters of Casing Fire Fighting Interfaces and GB 12514.4-2006 "Fire Fighting Interfaces Part

4.Types of Threaded Fire Fighting Interfaces" "Basic Parameters", consistent with GB 12514.1-2005, GB 12514.2-2006, GB 12514.3-2006 and GB 12514.4-2006 Aside from structural adjustments and editorial changes, the main technical changes are as follows:

a) Some terms and their definitions have been added (see Chapter 3, Chapter 3 of GB 12514.1-2005);

b) Added categories (see 4.1.1);

c) The type and specifications of the interface have been changed (see 4.1.2, GB 12514.2-2006, GB 12514.3-2006 and GB 12514.4-). Chapter 3 (2006)

d) The model designation requirements have been changed (see 4.2,

5.2 of GB 12514.2-2006,

5.3 of GB 12514.3-2006, and

5.4 of GB 12514.4). 2006, 5.2);

e) The basic dimensional requirements have been changed (see 6.1, GB 12514.2-2006, GB 12514.3-2006 and GB 12514.4-2006). 5.1);

1 Scope

China's mandatory technical specifications for fire couplings. A fire coupling is the quick connector that joins hose to hose, hose to hydrant and hose to pump, and its whole purpose is to be made and broken in seconds by a gloved hand in the dark. Everything about the specification follows from that and from the consequence of failure: a coupling that parts under pressure whips a charged hose, and a coupling that will not mate with the appliance that arrives leaves the crew with water they cannot use. So the dimensional requirements are absolute rather than nominal - the thread or lug form must be interchangeable across every brigade in the country - and the performance requirements cover the burst and proof pressure, the resistance to being dropped and dragged, the corrosion resistance after years in a cabinet, and the torque required to couple and uncouple.

This document defines the terminology for fire protection interfaces, and specifies the classification and model designation, interface structure, technical requirements, inspection rules, markings, and more. Packaging and storage, and the corresponding test methods are described. This document applies to fire-fighting interfaces used for connecting various fire-fighting water supply equipment.

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 1173 Cast aluminum alloys

GB/T 1176 Cast copper and copper alloys

GB/T 1804-2000 General tolerances - Tolerances for linear and angular dimensions without specified tolerances

GB/T 3190 Chemical composition of wrought aluminum and aluminum alloys

GB/T 7307 55° Non-sealing pipe thread

GB/T 9439 Gray Cast Iron Parts

GB/T 10125-2021 Corrosion Test in Artificial Atmospheres - Salt Spray Test

GB/T 12230 Technical Requirements for Stainless Steel Castings for General Valves

GB/T 15115 Die-cast aluminum alloys

GB/T 20878 Stainless Steel Grades and Chemical Composition

3 Terms and Definitions

The following terms and definitions apply to this document.

3.1 firecoupling Fire-fighting accessories used for connecting various fire-fighting water supply equipment.

Note. This document is referred to as the interface.

3.2 snap-type coupling It relies on the interface where two pairs of latches connect to the inner slide groove.

3.3 Card interface insertion-typecoupling An interface that connects the inner and outer interfaces by relying on spring force or other means to push two or more sliders.

3.4 screw-type coupling An interface that connects the internal and external parts using threads.