

ICS 83.140.40; 23.100.40
CCS G 42



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

GB/T 15908-2025

Replacing GB/T 15908-2009

**Plastics hoses and hose assemblies - Textile-reinforced types
for hydraulic applications - Specification**

塑料软管及软管组合件 液压用织物增强型 规范

(English Translation)

Issued on: August 29, 2025

Implemented on: March 1, 2026

**Issued by: State Administration for Market Regulation, National
Standardization Administration**

Table of Contents

Foreword

1 Scope

2 Normative references

Foreword

This document is in accordance with the provisions of GB/T 1.1-2020 "Guidelines for standardization work Part 1: Structure and drafting rules for standardization documents" Drafting.

This document replaces GB/T 15908-2009 "Plastic hoses and hose assemblies for hydraulic use, fabric reinforced" and Compared with GB/T 15908-2009, in addition to structural adjustments and editorial changes, the main technical changes are as follows.

--- Changed the range. The operating temperature range of oil-based hydraulic fluids has been changed from "-40 °C ~ 100 °C" to "-40 °C ~ 93°C", added relevant requirements for hydraulic fluid being water (see Chapter 1, Chapter 1 of the 2009 edition);

--- Added R18 type hose (see Chapter 4);

--- Added the hose with a nominal inner diameter of 3.2 and related requirements (see 6.1);

--- Changed the test method for minimum bending radius (see 7.3, 7.3 of the 2009 edition);

--- Changed the low temperature flexure test method (see 7.6, 7.6 of the 2009 edition);

---Changed the volume change rate requirements for oil-resistant base fluids. The volume change rate of the lining and outer covering was changed from "0%~35%" to "-15% to 35%" (see 7.9.2, 2009 edition);

---Changed the volume change rate requirement for water-based fluid resistance, and the volume change rate of the lining and outer covering was changed from "0%~25%" to "-15% to 35%" (see 7.9.3, 2009 edition);

--- Changed the requirements for water resistance, the volume change rate of the lining and outer covering was changed from "should not exceed 25%" to "-15% to 35%" (see 7.9.4, 2009 edition);

--- Added visual inspection requirements (see 7.10);

--- Changed the inspection frequency of type inspection and routine inspection items (see Appendix A, Appendix A of the 2009 edition).

This document is equivalent to ISO 3948:2020 "Plastics hoses and hose assemblies - Fabric-reinforced for hydraulic use"

Please note that some of the contents of this document may involve patents. The issuing organization of this document does not assume the responsibility for identifying patents.

1 Scope

This document specifies three types of hydraulic fabric reinforced thermoplastic hoses and hose assemblies with a nominal inner diameter range of 3.2~25.

Each type is divided into two grades according to the conductivity requirements. They are suitable for.

--- Oil-based hydraulic fluids HH, HL, HM, HR and HV (as defined in ISO 6743-4), temperature range -40 °C to 93°C;

--- Water-based hydraulic fluids HFC, HFAE, HFAS and HFB (as defined in ISO 6743-4), temperature range 0°C~ 60°C;

---Water, temperature range 0°C~60°C.

This document does not include requirements for pipe fittings, but is limited to performance requirements for hoses and hose assemblies.

NOTE: It is the user's responsibility to consult the hose manufacturer to confirm the compatibility of the hose with the fluid being used.

2 Normative references

The contents of the following documents constitute the essential clauses of this document through normative references in this document.

For referenced documents without a date, only the version corresponding to that date applies to this document; for referenced documents without a date, the latest version (including all amendments) applies to this document.

Note: GB/T 5563-2013 Rubber and plastic hoses and hose assemblies - Test methods for hydrostatic pressure (ISO 1402:2009, IDT)

Note: GB/T 1690-2010 Test method for resistance of vulcanized rubber or thermoplastic rubber to liquids (ISO 1817:2005, IDT)

ISO 4671 Rubber and plastics hoses and hose assemblies - Methods of measuring hose dimensions and hose assembly lengths

Note: GB/T 9573-2013 Rubber and plastic hoses and hose assemblies - Hose dimensions and hose assembly length measurement methods (ISO 4671:2007, IDT)

Note: GB/T 5568-2022 Rubber or plastic hoses and hose assemblies - Hydraulic impulse test without flexure (ISO 6803:2017, IDT)

Note: GB/T 24134-2009 Rubber and plastic hoses - Evaluation of ozone resistance under static conditions (ISO 7326:2006, IDT)

Note: GB/T 7528-2019 Rubber and plastic hoses and hose assemblies - Terminology (ISO 8330:2014, IDT)

ISO 10619-1:2017 Rubber and plastics hoses and non-reinforced hoses - Determination of flexibility and stiffness - Part 1: Bend test at room temperature