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

GB/T 15329-2019

**Rubber hoses and hose assemblies - Textile-reinforced
hydraulic types for oil-based or water-based fluids -
Specification**

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Foreword

This standard was drafted in accordance with the rules given in GB/T 1.1-2009.

This standard replaces GB/T 15329.1-2003 "Rubber hose and hose assemblies - reinforced hydraulics - Part 1. Oil-based flow

Body use.

The main technical changes compared with GB/T 15329.1-2003 are as follows.

- Revised scope (see Chapter 1, Chapter 1 of the.2003 edition);
- Adjusted normative references (see Chapter 2, Chapter 2 of the.2003 edition);
- Added terms and definitions (see Chapter 3);
- Modified the type code (see Chapter 4, Chapter 3 of the.2003 edition);
- Increased the applicable content and requirements for water-based fluids (see 5.1, 7.4.1, 7.4.3 and 7.9.3);
- Revised the inner diameter size requirements of R6 and R3 hoses (see Table 6.1, Table 5.1, Table 1 of the.2003 edition);
- Modified the hydrostatic performance and minimum bending radius requirements of the R3 hose (see 7.2, 6.2, 6.1, 6.2 of the.2003 edition);
- Removed the wear resistance performance requirements and removed the vacuum performance requirements of the R3 hose (see 7.8, 6.7, 6.8 of the.2003 edition);
- Increased visual inspection requirements for hoses (see 7.11).

This standard uses the translation method equivalent to ISO 4079.2017 "Rubber hose and hose assembly oil-based or water-based fluid suitable for weaving

Material Enhanced Hydraulic Type Specification.

The documents of our country that have a consistent correspondence with the international documents referenced in this standard are as follows.

---GB/T 1690-2010 vulcanized rubber or thermoplastic rubber liquid test method (ISO 1817.2005, MOD);

---GB/T 5563-2013 Rubber and plastic hose and hose assemblies hydrostatic test method (ISO 1402.2009, IDT);

Rubber and plastics hoses and non-reinforced hoses - Determination of flexibility and stiffness - Part 1 . Room temperature

Bending test (ISO 10619-1.2011, IDT);

--- GB/T 5567-2013 Rubber and plastic hoses and hose assemblies - Determination of resistance to vacuum (ISO 7233.2006, IDT);

---GB/T 5568-2013 Rubber or plastic hose and hose assembly without bending hydraulic pulse test (ISO 6803.2008, IDT);

---GB/T 7528-2011 Rubber and plastic hose and hose assembly terminology (ISO 8330.2007, IDT);

--- GB/T 7631.2-2003 Classification of lubricants, industrial oils and related products (Class L) Part 2. Group H (ISO 6743-4.1999, IDT);

---GB/T 7939-2008 Hydraulic hose assembly test method (ISO 6605.2002, MOD);

---GB/T 9573-2013 Rubber and plastic hose and hose assembly hose size and hose assembly length measurement method (ISO 4671.2007, IDT);

---GB/T 9575-2013 Rubber and plastic hose hose specifications and maximum and minimum inner diameter and cutting length tolerance (ISO 1307. 2006, IDT).

This standard has made the following editorial changes.

--- Delete the representation of the "bar" unit in the body, leaving only the "MPa" unit representation.

This standard was proposed by the China Petroleum and Chemical Industry Federation.

This standard is under the jurisdiction of the National Rubber and Rubber Products Standardization Technical Committee (SAC/TC35).

This standard was drafted. Guangzhou Hose Factory Co., Ltd., Beijing Tianyuan Auto Rubber Co., Ltd., Shenyang Rubber Research and Design Institute Limited the company.

1 Scope

This standard specifies the requirements for five types of fabric-reinforced hydraulic hoses and hose assemblies with a nominal inside diameter of 5 to 100.

This standard applies to.

---HH, HL, HM, HR and HV oil base fluids in accordance with ISO 6743-4 in the temperature range of $-40^{\circ}\text{C} \sim 100^{\circ}\text{C}$

Pressure fluid

--- HFC, HFAE, HFAS and HFB water-based fluids in accordance with ISO 6743-4 in the temperature range of $0^{\circ}\text{C} \sim 60^{\circ}\text{C}$

Pressure fluid

--- Water in the temperature range of $0^{\circ}\text{C} \sim 60^{\circ}\text{C}$.

This standard does not include requirements for pipe joints. Limited to the performance requirements of hose and hose assemblies.

Note. It is the responsibility of the user to consult the hose manufacturer to determine the compatibility of the hose with the fluid used.

2 Normative references

The following documents are indispensable for the application of this document. For dated references, only dated versions apply to this article.

Pieces. For undated references, the latest edition (including all amendments) applies to this document.

Rubber and plastics hoses and non-reinforced hoses - Determination of flexibility and stiffness - Part 1

Test (ISO 10619-1.2011, IDT)

Rubber and plastics and non-reinforced hoses - Determination of flexibility and stiffness - Part 2. below room temperature

Bending test (ISO 10619-2.2011, IDT)

ISO 1307 Rubber and Plastic Hose Hose Specifications and Maximum and Minimum Inner Diameter and Cut Length Tolerance (Rubberandplastics)

hose-Hosesizes, minimumandmaximuminsidediameters,
andtolerancesoncut-to-lengthhoses)

ISO 1402 Rubber and Plastic Hose and Hose Assembly Hydrostatic Test Method
(Rubberandplasticshosesandhose
assemblies-Hydrostatictesting)

ISO 1817 vulcanized rubber or thermoplastic rubber liquid test method (Rubber,
vulcanizedorthermoplastic-De-

Terminationoftheeffectofliquids)

ISO 4671 Rubber and plastics hoses and hose assemblies - Determination of hose size
and length of hose assemblies (Rubberand
plasticshosesandhoseassemblies-Methodsofmeasurementofthedimensionsofhosesandthe
Lengthsofhoseassemblies)

ISO 6605 Hydraulic Transmission Hose and Hose Assembly Test Method
(Hydraulicfluidpower-Hosesandhose
assemblies-Testmethods)

ISO 6743-4 Lubricants, industrial oils and related products (Class L) Classification Part 4. H
(hydraulic system) [Lubri-
Cants, industrialoilsandrelatedproducts(classL)-Classification-Part 4.FamilyH(Hydraulic sys-
Tems)]