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

GB 7128-2008

Replacing GB 7128-1986

**Automotive air brake hose and hose assemblies
(English Translation)**

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Foreword

6.1.2,6.1.3,6.1.4 of this standard is mandatory, the rest are recommended.

This standard is not equivalent SAEJ1402.2005 "(R) Automotive air brake hose and hose assemblies." this standard is based on SAEJ1402. redrafted 2005. For ease of comparison, the national standards are listed in this article in the informative Appendix A List of control models and SAE standard terms.

This standard SAEJ1402. The main difference 2005.

--- modify the specifications 6.3,11.5,12.5SP, 12.5 to 6,12,13SP, 13, and increased the size 15;

Chapter 3 --- modifications within the hose section, the outer diameter (Table 1);

--- amend the provisions of Chapter 6 identifies the part, and finally transferred to this standard logo in Chapter 8;

--- deleted 1.1 bar will explain some of the terms of this standard to join the preface;

--- deleted Table 1 Inch specifications.

Instead of the standard GB 7128-1986 "automotive air brake hose." the main difference between this standard and GB 7128-1986 are.

--- This standard is modified using SAEJ1402.2005, GB 7128-1986 are employed with reference to Japanese Industrial Standard JISD2606-1980, restructuring large, and project performance parameters vary greatly;

--- Inner diameter specifications of the original standard was changed to 10, 13 5,6,8,10,11,12,13SP, 13,15,16 nominal size (edition of 1986 1.2; edition, Chapter 3);

--- increased hose structure, Type A, Type AI, All type is defined (edition chapter 3);

--- increased vehicle installation recommended minimum bend radius (edition Chapter 5);

--- removed the hose appearance requirements, acceptance regulatory provisions (Chapter 4 version 2.11 and 1986);

--- deleted packaging, shipping, storage requirements (version 1986 5.2,5.3,5.4,5.5 and 5.6), an increase of the assembly of identification requirements (Edition 8.2).

Appendix A of this standard is an informative annex.

The standard proposed by China Petroleum and Chemical Industry Association.

This standard by the National Technical Committee of Standardization and rubber hoses rubber Technical Committee (SAC/TC35/SC1).

This standard is drafted. Car Group in Nanjing seven thousand four hundred twenty-five factory.

Participated in the drafting of this standard. Guangzhou Tianhe Hose Co., Ltd.

2 Normative references

Terms of the following documents become provisions of this standard by reference in this standard. For dated reference documents, all later Amendments (not including errata content) or revisions do not apply to this standard, however, encourage the parties to agreements based on this standard Whether the latest versions of these documents. For undated references, the latest version applies to this standard.

GB/T 1690-2006 Rubber, vulcanized or thermoplastic liquid resistant test methods (ISO 1817:2005, MOD) GB/T 5563 Rubber and plastics hoses and hose assemblies Hydrostatic testing (GB/T 5563-2006, ISO 1402.

1994, IDT)

GB/T 10125 artificial atmosphere corrosion test Salt spray test (GB/T 10125-1997, eqv ISO 9227:1990) GB/T 14905 Rubber and plastics hoses between layers of adhesive strength

was measured (GB/T 14905-1994, eqv ISO 8033:1991)

3 Hose structure and size

Automobile air brake hoses have three different structures. All specifications are listed in Table 1.

A type of an elastic body layer, and a fiber reinforced elastomer outer layer coating composition;

An elastic body AI type outer layer, and a layer of wire or reinforcing fiber woven fiber coating composition;

All type of an elastic body layer, wire or fiber-reinforced layer and a fibrous woven or elastomeric outer coating layers, the size of the hose see SAEJ517100R5, equivalent thereto.

Table 1 A, and the inner diameter AI All hose and an outer diameter in millimeters

Nominal

size

A type AI		inner diameter		All type		Type A		Type		outer diameter		of the		
outer diameter	AI	outer diameter	type	All	Min	Max	Min	Max	Min	Max	Min	Max	Min	Max
5	4.7	5.4	4.8	5.5	10.0	12.0	12.0	13.0	12.7	13.7	6	5.5	6.6	6.1
6	6.9	12.0	16.7	13.6	14.6	14.3	15.3	8	7.3	8.5	7.9	8.7	14.5	18.3
7	15.1	16.2	16.7	17.6	10	10.3	9.1	-	-	16.5	19.8	-	-	-
8	10.3	11.1	11	17.0	20.5	18.1	19.3	18.9	20.0	12	11.2	12.4	-	-
9	18.0	21.4	-	-	-	13SP	11.9	13.5	-	-	20.0	23.5	-	-
10	-	-	-	-	13	-	12.7	13.7	-	-	20.5	21.7	22.8	24.0
11	15	14.2	15.7	-	-	23.0	26.8	-	-	-	16	15.1	16.7	15.9
12	17.0	24.0	27.8	23.7	24.9	26.8	28.0							

NOTE: If required, the sizes 10, 12 and 13SP A hose fitting can be assembled wild-type connector, but with the assembly-type connectors and All type AI Use different hose.

4.1 Permanent joint

Permanent joint when the hose fitting, the hose assembly of the hose to comply with Table 1, A, and size requirements AI All type hose.

4.2 Wild-type connector assembly

When the hose assembly wild-type connector assembly, the hose of hose assemblies shall comply AI table and a variety of hose All shall comply with size requirements or Table 1 A hose 10, 12 and 13SP size requirements specifications. Wild-type connector assembly and with AI All Different type of hose used.

5 Minimum bend radius

Table 2 lists the recommended vehicle mounting minimum bend radius.

TABLE 2 Recommended minimum bending radius in millimeters

Nominal size minimum bend radius (curved inside) 13SP 100

6 Performance

Note 1: All except bear one or two test samples to verify the performance of and length than the pressure change test and after the test should be destroyed in the analysis is complete.

Note 2: bursting strength test and the tensile strength assembly is to identify test, does not mean that the hose assemblies can be used under those conditions.

6.1.1 Pipe fittings

Fittings shall comply with all parts of this standard. After fitting to the hose, the smallest diameter of the tube or hose is not less than the joint Table 1 66% of the minimum inner diameter of the hose shown in FIG. All hose assemblies before any other test of this standard should be performed by this requirement.

6.1.2 Verify pressure

In the hose assembly charged air or nitrogen pressure of $2\text{MPa} \pm 0.1\text{MPa}$, and immersed in water should leak 30s.

6.1.3 The minimum burst pressure Minimum burst pressure test according to GB/T 5563 for, when the hose or hose assembly is subjected to pressure 6MPa, there should be no blasting, vent the drain pipe joint or separation.

6.1.4 Assembly Tensile strength

Take a 450mm long hose assemblies (including joint) were tested for the rate of longitudinal stretching $25\text{mm/min} \pm 2.5\text{mm/min}$, and Test until separation of the joint hose or hose damage. The nominal size of 6mm and less occurrence of failure load specifications of not less than 1100N, Nominal size of 6mm or more is not less than 1450N.

6.1.5 Change in length

Length variation test shall GB/T 5563 (elongation and contraction) of the initial pressure measurements are made at 0.1MPa. Hose or hose Change in length of the assembly should be measured at 1.5MPa, and the variation range is between + 5% to 7%.