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

GB 15383-2011

Replacing GB 15383-1994

Connection types and dimensions for gas cylinder valve outlets

气瓶阀出气口连接型式和尺寸

(English Translation)

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Foreword

All the technical contents of this standard is mandatory.

Accordance with the standards GB/T 1.1-2009. Drafting Rules "Standardization Guide Part 1 standard structure and preparation of" given.

This standard replaces GB 15383-1994 "cylinder valve outlet connections and sizes." this standard compared with GB 15383-1994, mainly the following differences.

--- Modify the scope of application;

--- Modify the normative references the contents;

--- 5.1 modify the title, from the "non-flammable and non-toxic gas" to "non-toxic and non-flammable gas, which is smaller than the thermal stability 3 groups of gas ";

- Modified sulfur hexafluoride, xenon gas outlet connection type, size, and icons;
- Revised Table 6, delete the G1/2, G3/4 two kinds of connections are not recommended thread sizes;
- Revised Table 7 deleted Specification. A connecting thread G5/8's;
- Modified propylene, propane (see Table 9), natural gas (see Table 10) of the outlet connection type, size, and icons;
- 5.7 modify the title of the original "flammable, toxic, corrosive (alkaline) or non-corrosive gases" by "flammable, toxic, Corrosive (alkaline corrosive) gases ";
- Modify the table 11 of ammonia outlet connection type, size, and icons;
- Table 13 modified spontaneous combustion gas outlet connection type, size, and icons;
- Revised 5.12 the title from the original "oxidant, toxic, corrosive gases" to "oxidant, toxic and/or corrosive gas body";
- Modified Table 18 of the outlet connection type, size, and icons;
- Revised Appendix B. Since the text in the table in the form of numbers or various gas outlet has changed, so attached Appendix B in the form of numbers or have made the appropriate changes, and provides S and L determined in accordance with the size of the nuts of different materials;
- Added "mixed gas" and "digital coding (FTSC)" terms and definitions;
- Increasing the valve at the outlet to determine the principles, including the basic principles, as well as single gases, gas mixtures and to determine the specific gas in principle;
- Information about the various types of gas in the table name, increased from the original 70 kinds of more than 170 (Table 1 to Table 18 "name of the gas," a Bar blank line after the name of the gas is increased gas);
- Table after an increase of 9 "Notes" clearly when the numbers 11 and 12 (see Table 8 and Table 9) while appearing in the same kind of gas, the outlet Connection type and size of the selection principles;
- Increased Table 10, the modified hydrogen, natural gas classified as No. 14;
- Delete the original standard in Table 5, Table 11, Table 14 1 "connection thread size of the outlet connection type, size, and icons;
- Delete the original contents of the standard table 4, and will merge it with Table 3;
- Deleted the original criteria for "unlisted gas cylinder valve outlet size can be selected depending on the characteristics of a gas reference to the use of" and "filled with hydrogen

when the gas, the absolute prohibition of the use of all other forms except the threaded connection "content.

The standard reference method using redrafted the ISO 5145:2004 "cylinder valves for gas and mixed gas outlet --- selection and Size "preparation, and ISO 5145:2004 is equivalent to the degree of non-conformity. The standard valve outlet port connector type and size of the packet and Gas group with ISO 5145:2004 exactly.

This standard by the National Standardization Technical Committee cylinder (SAC/TC31) and focal points.

Drafting of this standard. Shanghai Institute of Special Equipment Inspection & Technology, Shanghai gas valve plant Ningbo Fu valve has Ltd., Shanghai Star to Environmental Equipment Co., Ltd., Shanghai High Pressure Container Co., Ltd, Shanghai Regulator Factory Limited.

1 Scope

This standard specifies the principles for determining the cylinder valve outlet connection type and size-related terms and definitions, cylinder valve outlet, all kinds of Gas cylinder valve outlet connections and sizes, description and so on.

This standard applies to the permanent gases, liquefied gases, dissolved gas cylinder valve cylinder configuration.

This standard does not apply to the outlet and connectors, and low-temperature gas respirator gas cylinder valves.

2 Normative references

The following documents for the application of this document is essential. For dated references, only the dated version suitable for use herein Member. For undated references, the latest edition (including any amendments) applies to this document.

GB/T 1804 General tolerances Tolerances for linear and angular dimensions without individual tolerance GB/T 7307 55 ° non-sealing pipe thread GB/T 13005 cylinders term ISO 5145:2004 for single gas and mixed gas cylinder valve outlet and Dimensions (Cylindervalueoutlets forgasesandgas mixtures-Selectionanddimensioning) ISO 10156:1996 gases and gas mixtures used to select the valve outlet port determination of fire potential and oxidizing ability (Gases andgas mixtuire-Determinationoffirepotentialandoxidizingabilityfortheselectionofcylinder valveoutlets) ISO 10298:1995 Determination of toxic gas or gas mixture (Determinationoftoxicityofagasofgas mixture) ISO 13338:1995 Determination of gas or gas mixture corrosive (Determinationoftissuecorrosivenessofagas orgasmixture)

3 Terms and Definitions

GB/T 13005 and established the following terms and definitions apply to this document.

Mixed gas gasmixture Two internal filling of two or more cylinders or gas and/or liquefied have mixed purpose.

Gas digitally encoded numericalgascode (FTSC) FTSC encoded by the combustion gases is an abbreviation for gas, toxic, and corrosive state of the English phrase in the first letter of word. FTSC encoded using four digits sequentially and directly indicate the basic characteristics of each gas.

4.1 Basic Principles

This standard establishes a determination cylinders containing any gas or gas mixture nature of the method, FTSC namely four-digit numbers coding. According to each of the physical and chemical characteristics of gas or gas mixture (ie, flammability, toxicity, corrosion and state), the number of performed FTSC Word coded classification (see Appendix A A.1).

FTSC coding gas and mixed gas can into each one of the 15 gas group (see Appendix A A.2), so that the cylinders Outlet connections and sizes for each gas group match.

Note: The only intention is to gas digitally encoded the same nature gas grouped together, so that each group can select specific cylinder valve outlet. The figures compiled gas Code applies only to the choice of cylinder valve outlet within the scope of this standard.

4.2 Determine the principle of a single gas

Single gas into the first to the 14 gas group. It should realize that the "single gas" Allow impurities, but does not affect the valve outlet Select the port.

4.3 Determine the principles of the mixed gas

A mixed gas of four-digit coding (FTSC) grouping principle and as a single gas. A mixed gas of digitally encoded packet is FTSC by the final mixture flammability, oxidizing, toxic and corrosive to the decision, the mixture into a certain group of gases and gas mixtures (see

Table A.1) in a group. Combustion, oxidation resistance measurement see ISO 10156:1996; determination of toxicity see ISO 10298:1995; corrosion

Determination see ISO 13338:1995.

Containing spontaneous combustion gases (ie spontaneous combustion gases, such as silane table A.10) mixture, when the content of spontaneous combustion gas is higher than 1.4%, should be considered as a mixture of spontaneous combustion.