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

CJ/T 217-2013

**Compound quick air inbreathe-release valve for water supply
pipeline
(English Translation)**

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Foreword

This Standard is drafted according to the rules specified in GB/T 1.1-2009.

The Standard is an amendment to CJ/T 217-2005 Compound Quick Air

Inbreathe-Release Valve for Water Supply Pipeline. This Standard, in comparison with

CJ/T 217-2005, has the major technical changes as follows.

- Modify the scope of application for nominal size, nominal pressure and water temperature in Chapter 1;
- Modify the introduction paragraph. And change the normative references in Chapter 2;
- Add the terms and definitions of floating body, floating body module, large intake

and exhausted hole, and small intake and exhausted hole;

- Modify the terms and definitions of "air pressure when closing of air inbreathe-release valve";
- Delete the section materials in the Chapter "Requirements". And create a new chapter for the materials;
- Add the copper alloy as valve body materials;
- Add the carbon structural steel as part materials;
- Add the exhaust volume parameters of nominal size for DN15~DN50 in Table 2;
- Add the requirements - installing a protective cover outside the air intake and exhaust passage in-between the valve body and valve bonnet;
- Add the content of inspection items in previous Table 4 "Inspection and Test Items". And revise and edit it as Table 3 "Inspection Items";
- Modify the presentation form of sampling inspection. And delete the previous Table

3 "Sampling Table for Ex-factory Test Sample";

- Modify the previous Figure 1 of monolithic structure style for air inbreathe-release valve TO Figure A.1a). Remove the structure diagram out from the main body, and incorporate it into Appendix A;
- Add the Figure A.1c) Basic structure style in Appendix A "Air Inbreathe-Release Valve of Threaded Connection";
- Add the specifications and quantity of curve of intake and exhaust volume in Figure A.1 of previous Appendix A. And change the Appendix A to Appendix C;
- Delete the previous Appendix C, and incorporate the Figure C.2 in previous Appendix C into Appendix F;
- Delete the Section "Test Report" in previous Chapter 9;
- Delete the "Test Report Card" in previous Appendix E. And change the previous Appendix D to Appendix E;
- Modify the content of Chapter 5 "Product Model". And incorporate 5.1 and 5.2 into Appendix B;

- Delete the B.1 "Calculate the Exhaust Volume Measured by the Law of Conservation of Mass" in previous Appendix B. Incorporate the previous B.2 "Calculate the Exhaust Volume Measured by orifice plate" into Appendix D. And add the calculation Formula of pressure differential between inlet pressure and outlet pressure when the air inbreathe-release valve releases.

The Standard takes reference to the compilation of ANSI/AWWA C512-2004 Air-release, Air/vacuum, And Combination Air Values For Waterworks Service.

This Standard was proposed by Standard Rating Institute of Ministry of Housing and Urban-rural Development.

This standard shall be under jurisdiction of Municipal Water Supply and Drainage Standardization Technical Committee of the Ministry of Housing and Urban-rural Development.

This Standard is drafted by. Guangdong Yongquan Valve Science and Technology Co., Ltd., Guangdong Zhude Industrial Co., Ltd., and Beijing Yongquan Tengda Valve Science and Technology Co., Ltd.

1 Scope

This Standard specifies the term and definition, structure style, product model, materials, requirements, test methods, inspection rules, marks, product specification, product packaging, storage and transportation of compound quick air inbreathe-release valve for water supply pipeline (hereinafter referred to as air inbreathe-release valve).

The Standard applies to the air inbreathe-release valve of nominal size of DN15~DN300, nominal pressure of not more than PN25, and water temperature of 0°C~40°C for water supply pipeline.

2 Normative references

The articles contained in the following documents become part of this standard when they are quoted herein. For the dated documents so quoted, only the dated versions apply to this document. For undated reference documents, the latest versions (including all corrections) apply to this Standard.

GB/T 196 General purpose metric screw threads - Basic dimensions

GB/T 197 General purpose metric screw threads - Tolerances

GB/T 700 Carbon structural steels

GB/T 1047 Pipework components--Definition and selection of DN(nominal size)

GB/T 1048 Pipework components--Definition and selection of PN

GB/T 3098 (All parts) Mechanical properties of fasteners

GB/T 3280 Cold rolled stainless steel plate sheet and strip

GB/T 6739-2006 Paints and varnishes - Determination of film hardness by pencil test

GB/T 7306.2 Pipe threads with 55 degree thread angle where pressure-tight joints are made on the threads--Part 2. Taper internal and external threads

GB/T 8923-2008 Preparation of steel substrates before application of paints and related products

GB/T 9286-1998 Paints and varnishes-Cross cut test for films

GB/T 9969 General principles for preparation of instructions for use of industrial products

GB/T 12220 General purpose industrial valves-Marking

GB/T 12225 General purpose industrial valves- Specification of copper alloy castings

GB/T 12227 General purpose industrial valve - Specification of spheroidal graphite iron castings

GB/T 13927 Industrial valves - Pressure testing

GB/T 17241.6 Integral cast iron pipe flanges

GB/T 17241.7 Specifications for cast iron pipe flanges

GB/T 21873 Rubber seals - Joint rings for water supply drainage and sewerage pipelines - Specification for materials

JB/T 308 Valves model designation method

JB/T 7928 General purpose industrial valve - Delivery specification