

ICS 23.060.99

CCS J 16



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

GB/T 24920-2010

Steel pressure relief valves for petrochemical industries

石化工业用钢制压力释放阀

(English Translation)

Issued on: August 9, 2010

Implemented on: December 31, 2010

Issued by: Standardization Administration of China

Table of Contents

Introduction	
1 Scope	
2 Normative references	
3 Terms and definitions	
4 Ordering Guide	
5 Technical requirements	
5.1 General	
5.2 Pressure - Temperature Rating	
5.3 Runner and effective area code	
5.4 Connection size	
5.5 Length of the structure	
3 Spring 5.6	
5.7 Material	
Performance Requirements 3	
6.1 Setting pressure	
6.2 Sealing performance	
Discharge pressure 6.3	
6.4 Opening height	
6.5 Blowdown	
6.6 Mechanical properties	
6.7 Nominal displacement	
Test Method 5	
7.1 Test requirements	
7.2 Test Method	
8 6 Inspection Rules	
8.1 Test item	
8.2 Factory inspection	
8.3 Type inspection	
9 Signs and seals	
9.1 Mark on the nameplate	
9.2 Mark on the valve body	
7 9.3 seals	

10 Packaging Storage

Appendix A (informative) procurement specifications

Appendix B (normative) Spring loaded pressure relief valve data table

Annex C (normative) Pilot pressure relief valve data table

Foreword

This revised standard adopts API526.2002 "steel flange end pressure relief valve" (in English).

This standard API526.2002 compared to the major differences are.

- Complement the technical requirements and the content of the product;
- Increased performance requirements, test methods and inspection rules;
- The pressure levels of 150 to 2500 lbs stage is converted to 2.0MPa ~ 42.0MPa;
- The valve size NPS1 ~ NPS8 converted to nominal size DN25 ~ DN200;
- Original standard structure and contents of editorial changes were made;
- To API526.2002 reference standard were adjusted with our standard instead of the corresponding standards.

The Standard Appendix B, Appendix C are normative appendices, Appendix A is an information appendix.

The standard proposed by China Machinery Industry Federation.

The standard valve by the National Standardization Technical Committee (SAC/TC188) centralized.

This standard was drafted. Hefei General Machinery Research Institute, Hangzhou Hua Hui Valve Co., Ltd., Shanghai Kate Valve Manufacturing Co., Ltd., Shanghai Anderson Greenwood Crosby Valve Co., Ltd., the national oil and gas wellhead equipment for Quality Supervision and Inspection Center.

1 Scope

This standard specifies the flange connection steel pressure relief valve terminology and definitions, ordering guides, technical requirements, performance requirements, test methods and inspection rules, signs and packaging storage nameplate.

This standard applies to nominal pressure PN20 ~ PN420, nominal size DN25 ~ DN200, set pressure of not less than 0.1MPa stone Chemical flanged steel Spring loaded pressure relief valves and pilot operated pressure relief valve (hereinafter referred to as a pressure

relief valve).

2 Normative references

The following documents contain provisions which, through reference in this standard and become the standard terms. For dated references, subsequent Amendments (not including errata content) or revisions do not apply to this standard, however, encourage the parties to the agreement are based on research Whether the latest versions of these documents. For undated reference documents, the latest versions apply to this standard.

GB/T 9113.1 ~ 9113.4 Integral steel pipe flanges GB/T 12224 steel valves - General requirements (GB/T 12224-2005, ASME B16.34a.1998, NEQ) GB/T 12241 valve general requirements (GB/T 12241-2005, ISO 4126-1:1991, MOD) GB/T 12242 pressure relief device performance tests (GB/T 12242-2005, ASME PTC25.1994, MOD) GB/T 12243 Spring loaded safety valves (GB/T 12243-2005, JIS B8210:1994, MOD) GB/T 20972.1 oil and gas exploration in the oil and gas industry Part 1 material containing hydrogen sulfide environment for. Choose Anti-crack General principles of materials (GB/T 20972.1-2007, ISO 15156-1:2001, IDT) Size GB/T 24921.1 petrochemical industry pressure release valve identification, selection and installation - Part 1. determine the size and selection (GB/T 24921.1-2010, API 520.1.2000, MOD) JB/T 106 valves and painted signs JB/T 7928 General Valve supply requirements

3 Terms and Definitions

GB/T 12241, GB/T 12242, the terms and definitions GB/T 24921.1 established apply to this standard.

4 Ordering Guide

4.1

Pressure relief valve procurement specifications in Appendix A.

4.2

the demand side in the procurement of the pressure relief valve, pressure relief should choose the type and technical specifications required by the provisions of the valve to ensure that there is enough faith Interest rates, the demand side should be standardized procurement list in Appendix A requirements given in the order.

4.3

In order to fully understand the conditions of release pressure release valve system, should provide the acquirer to determine the valve size and connection data used, in order to select the effective area of the flow path and code required.

4.4

When the demand-side and supply-side procurement requirements of this standard or inconsistent requirements should purchase orders or demand side prevail.

5.1 General

5.1.1

The design should be considered for inclusion in the guide structure to ensure stability and sealing valve action required.

5.1.2

for Steam pressure relief valve should be set reliable lifting device (lifting wrench), when the valve is subjected to at least set pressure 75% of the pressure, which can be used to enhance the effect of the release means sealing force on the valve flap.