

ICS 17.100
CCS N11



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

GB/T 1227-2017

Replacing GB/T 1227-2010

Accurate pressure gauge

精密压力表

Issued on: December 29, 2017

Implemented on: July 1, 2018

**Issued by: General Administration of Quality Supervision, Inspection and
Quarantine of the People's Republic of China;
Standardization Administration of China**

Table of Contents

- 1 Scope
- 2 Normative references
- 3 Product Categories
- 3.1 Type
- 3.3 Basic parameters

Foreword

This standard was drafted in accordance with the rules given in GB/T 1.1-2009. This standard replaces GB/T 1227-2010 "precision pressure gauge." Compared with GB/T 1227-2010, the main technical changes except editorial modification are as follows:

---Changes have been made to the requirements for the length of directly installed meter joints (see 3.3.4,.2010 version 3.3.4);

--- Increased overpressure requirements and test methods for high pressure gauges (see 4.9, 5.12);

--- Increased alternating pressure requirements and test methods for high pressure gauges (see 4.10.2, 5.13.2);

--- Modify the test method of vibration resistance to the working environment (see 5.16,.2010 version 5.16). This standard is proposed by China Machinery Industry Federation. This standard is under the jurisdiction of the National Industrial Process Measurement, Control, and Automation Standardization Technical Committee (SAC/TC124). This standard is drafted by: Shaanxi Blower (Group) Co., Ltd. This standard was drafted by: Anhui Tiankang (Group) Co., Ltd., Beijing Brady Instruments Co., Ltd., Shaanxi Metrology Science Research Institute, Xiyi Group Co., Ltd., Hongqi Instrument (Changxing) Co., Ltd., Shanghai Automation Instrumentation Co., Ltd., Beijing Const Instruments Science and Technology Co., Ltd., Chongqing Kunlun Instrument Co., Ltd., Shanghai Measurement and Measurement Technology Research Institute, Zhejiang Prosemi Instrumentation Co., Ltd. Division, Qingdao Huaqing Group Co., Ltd., Xi'an Institute of Industrial Automation Instrumentation, Shanghai Saitu Instrument Co., Ltd., Zhejiang Zhongheng Instrument Co., Ltd. Watch Co., Ltd., Xi'an Shaanxi Drum Power Co., Ltd., Anhui Lande Instrument Co., Ltd., Ningbo Jiangbei Xingda Welding & Decompression Instrument Factory, Ningbo Longxing Welding & Cutting Technology Co., Ltd. and Ryderda Instrument Co., Ltd. The main drafters of this standard. Fan Lijun, Mao Zhiwen, Gao Yudong, Zhou Bingzhi, Yuan Bo, Zhou Chunlong, Yuan Defang, He Xin, Wang Xiaoping,

Pan Zhengyu, Zhou Yonghua, Jiang Wanwei, Zhang Wei, Liu Tongxian, Liu Saihong, Yang Kai, Yang Yongliang, Zhu Chengwei, Ye Hai, Huang Qinjian. The previous versions of the standards replaced by this standard are.

---GB/T 1227-1986, GB/T 1227-2002;

--- GB/T 1226-2010. Precision pressure gauge

1 Scope

GB/T 1227-2017 is the Chinese national standard on accurate pressure gauge, in the field of metrology and measurement. The /T suffix marks it as a recommended standard: it is not compulsory by itself, but it becomes binding as soon as a contract, a tender or a customer specification calls it up - which in practice is how most foreign buyers meet it. It was issued on 29 December 2017 by the General Administration of Quality Supervision, Inspection and Quarantine of the People's Republic of China; Standardization Administration of China, and has been in force since 1 July 2018. Classification: ICS 17.100, CCS N11. This page is published from the official record of the standard held by the Chinese standards administration: the identification, the dates, the classification and the issuing body are taken from there. The clause text, the tables and the numeric limits are in the document itself, which is delivered complete in English translation.

This standard specifies the product classification, technical requirements, test methods, inspection rules and signs, packaging and storage of precision pressure gauges. This standard applies to mechanical pointer-type precision pressure gauges and vacuum gauges using spring tubes (C-shaped tubes, coil spring tubes, spiral tubes) as elastic elements. Pressure vacuum gauge (hereinafter referred to as gauge).

Note. This standard includes a stainless steel pressure gauge and a special gauge pressure gauge.

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 version (including all amendments) applies to this document.

GB/T 2423.10 Environmental testing for electric and electronic products Part 2. Test methods Test FC. Vibration (sine)

GB/T 13384 general technical conditions for mechanical and electrical product packaging

GB/T 17214.3-2000 Working conditions for industrial process measurement and control devices - Part 3. Mechanical influences

GB/T 25480 instrumentation, transportation and storage of basic environmental conditions

and test methods

JB/T 5528 Pressure Gauge Scale and Division

JB/T 9252 General technical requirements for basic types, dimensions and pointers of the indicator part of industrial automation instruments

3.1 Type

3.1.1 The instrument is divided into measurement categories: pressure gauges, vacuum gauges, and pressure vacuum gauges.

3.1.2 The instrument installation method is direct mounting type, embedded type.

3.2 The accuracy level of the instrument The accuracy level of the instrument is divided into.

0.1 level;

0.16 level;

0.25 level;

0.4 level.

3.3 Basic parameters

3.3.1 nominal shell diameter (mm) series. 150, 200, 250, 300, 400.

Note. The shell size of the special pressure gauge housing is determined by the manufacturer and the user.

3.3.2 The measuring range of the meter should meet the requirements of Table 1.