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JJG

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

JJG 52-2013

Replacing JJG 52-1999; JJG 573-2003

**Verification Regulation of Elastic Element Pressure Gauges,
Pressure. Vacuum Gauges and Vacuum Gauges for General Use
(English Translation)**

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3 Terminology and units of measurement (1)

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Introduction

JJF1002 "national verification procedures write rules", JJF1001 "common measurement terms and definitions" JJF1059 "Evaluation and Expression of Uncertainty in Measurement" series together constitute the basic norms of the regulations revision.

This procedure combined with China's national conditions, the use of the International Organization of Legal Metrology (OIML) International Recommendation R112 "with and record pressure gauge indicating the type of the elastic element, vacuum gauge, pressure - vacuum gauge (General Instrument), "part of the content.

This procedure is in JJG 52-1999 "spring tube general pressure gauges, pressure vacuum gauge and vacuum gauge" and JJG 573-2003 "diaphragm pressure gauge" two procedures on a consolidated basis, preserving effective content premise amendment.

This procedure compared with JJG 52-1999, JJG 573-2003, in addition to editorial changes, the major technical changes are as follows.

- Press JJF1002-2010 requirements, increasing the content of the Preamble;
- Regulations covering the content JJG 52-1999, JJG 573-2003 two procedures for elasticity General element type pressure gauges, pressure vacuum gauge and vacuum calibration table;
- Delete the contents of the measuring range upper limit of the range;
- Improve the content of the overview;
- Refine the test conditions;

- Straighten out the order of test items and test methods;
- Added "test certificate/test results within the notice page format and" Appendix;
- Remove the gauge tolerance calculated value list.

Usually the elastic element type pressure gauges, pressure vacuum gauge and vacuum meter testing procedures

1 Scope

The order applies to general formula elastic element pressure gauges, pressure vacuum gauge and vacuum gauge (hereinafter referred to as gauge) of Initial verification, use and subsequent verification check.

2. References

This procedure references the following documents.

JJF1008-2008 pressure measurement terminology and definitions GB/T 1226-2010 General Pressure Gauge for dated references, only the dated edition applies to this procedure; undated reference documents Member, the latest edition (including any amendments) applies to this procedure.

3 terminology and units of measurement

3.1 Terms

3.1.1 pressure gauge resilient element (can be referred to. pressure gauge)
elastic element pressure gauge Elastic sensitive element to measure the pressure of the pressure sensitive element of the instrument. [JJF1008-2008 the definition 4.1]

3.1.2 Setpoint deviation Output variable according to the requirements output, the difference between the set value and the measured actual value. [JJF1008-2008 set

Righteousness 7.10] 3.1.3 switch value switching value when the digital control instrumentation stroke (or the next trip), the output change from one state to another state measured Input. [JJF1008-2008 defined 7.11] 3.1.4 switching difference differential gap the same set-point, the difference between the lower stroke switching value. [JJF1008-2008 the definition 7.12] 3.2 units of measurement Legal units of measurement used to gauge Pa (Pascal), or its decimal multiples units. kPa, MPa and the like.

4 Overview

Pressure gauge is mainly used for liquid, gas and vapor measurement.

Gauge works by using elastic sensing element (such as a spring tube) elastically deformed under pressure, the role of its shape and size of the pressure variables into a linear relationship, through a transmission mechanism amplified by the pointer in the indexing plate on indicates the pressure measured. Elastic pressure gauge sensitive element can be

divided into. spring tube, bellows, diaphragm