

ICS 17.100
CCS N11



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

GB/T 13992-2010

Replacing GB/T 13992-1992

Metallic bonded resistance strain gauges

金属粘贴式电阻应变计

Issued on: December 1, 2010

Implemented on: May 1, 2011

**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 Terms and Definitions
 - 3.1 Classification Terms and definitions
 - 3.2 Terms and Definitions
- 4 Classification and model name
- 17 Discard Method Appendix A (informative) questionable value

Foreword

This standard is GB/T 13992-1992 "resistance strain gauge" amendments. This standard compared with GB/T 13992-1992, the main changes are as follows: Name

- revised standards for. metal paste-type resistance strain gauges;
- The stress analysis and strain gauge sensors are used in the list of technical indicators technical requirements Table 2 and Table 3;
- Increasing the strain gauge visual inspection;
- Increasing the calculation formula in the test method;
- Remove the original standard in Appendix B, Appendix C;
- In the strain gauge sensor with technical indicators cancel the technical requirements creep at room temperature, increasing the average creep Dispersion value requirement;
- Increasing the plant should be different from other flags in the flag on the strain gage requirements. The standard proposed by China Machinery Industry Federation. The standard by the China Machinery Industry Federation. This standard is drafted by: China Testing Technology Research Institute, Shenyang Academy of Instrumentation Science, the National Quality Supervision and Inspection Center sensor, National Instruments Component Quality Supervision and Inspection Center, Zemic Instruments Incorporated. Participated in the drafting of this standard. Ningbo Keli Electric Manufacturing Co., Ltd., Jinan Admiralty electronic weighing Co., Ltd., Shanghai Electric is one spirit Measurement equipment company, Dongguan City, LAN Hai Electronics Co., Zhejiang Huangyan Test Instrument Factory, Guangzhou electrical measuring instrument factory. The main drafters of this standard. Liumei Sheng, Yu Wenbo, Ma Liang Cheng, Xue Jialin, Deng Bin foot, Pingren Xian, Shen concept of forest, in Kui, Lu Wenlin, Yan Zhipeng, Xuqiu Ling, Chen Chao, Yang Jiebin, Wu Hong, Zang Yan. This standard replaces the standards previously

issued as follows:

--- GB/T 13992-1992. Metal paste resistance strain gauge

1 Scope

GB/T 13992-2010 is the Chinese national standard on metallic bonded resistance strain gauges, 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 1 December 2010 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 May 2011. 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 metal paste resistance strain gauge (hereinafter referred to as strain gage) technical requirements, test methods, inspection rules. This standard applies to the wire type and paste-type metal foil resistance strain gauges. Other types of strain gauges can be performed with reference to this standard.

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 2828.1-2003 Sampling procedures for inspection - Part 1. by acceptance quality limit (AQL) retrieval batch test sample Programme (ISO 2859-1.1999, IDT)

GB/T 2829-2002 periodic inspection Sampling procedures and tables (suitable for process stability test)

GB/T 13965-2008 Component term instruments

3 Terms and Definitions

GB/T 13965-2008 established in the following terms and definitions apply to this standard.

3.1 Classification Terms and definitions

3.1.1 Metal paste resistance strain gauge metallicbondedresistancestraingauge Metal

resistor as the sensing gate, fixed with an adhesive on the specimen resistance strain gauge (the strain gauge).

3.1.2 Room temperature gauge normal temperature strain gauge Operating temperature range is generally (-30 to 60) of the strain gauge °C.

3.1.3 Temperature strain gauges medium temperature strain gauge The maximum operating temperature is higher than 60 °C, no more than 300 °C strain gauge.

3.1.4 High temperature strain gauge high temperature strain gauge The maximum operating temperature is higher than 300 °C strain gauge.

3.1.5 Low-temperature strain gauges low temperature strain gauge Minimum working temperature is lower than the strain gauges -30 °C. Characteristics

3.2 Terms and Definitions

3.2.1 Strain gauge type strain gauge family Fabrication of the strain and the type of materials used and the same structure sensitive grid shape the same for the same type of strain gauge.

3.2.2 Strain gauge type strain gauge type The same type of strain gauge in the same nominal size and nominal operating characteristics, for the same strain gauge type.