

ICS 27.120

CCS F88



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

GB/T 13180-2008

Replacing GB/T 13180-1991

G-M counter tubes for detecting X, gamma radiation

X、 γ 射线GM计数管

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Foreword

This standard replaces GB/T 13180-1991 "gamma-ray counter." The main difference compared with the standard GB/T 13180-1991 as follows:

- Standard name changed to "X, gamma-ray GM counter";
- Revised Chapter 3, "terms and phrases" in some of the terminology, such as "counter", "life" and so on;
- Increasing the terms and the term "working voltage limits", "insulation resistance", "angular response";
- Modified GM counter tube classification (4.2);
- Modify the "technical requirements" of the content (Chapter 5);
- Increased "counter the appearance and size of the test" (6.2) and "counter insulation resistance test" (6.3);
- Revised Table 1 "GM counter tube technical performance parameters," Table 2 "GM counter performance parameters limit the work environment" and Table 4 "Test, the pilot project group";
- Modify the "mark" in the content (8.1). The standard proposed by China National Nuclear Corporation. This standard by the National Standardization Technical Committee on nuclear instrumentation. This standard was drafted. nuclear (Beijing) Nuclear Instrument Factory, Nanjing Huadong Electronics Group Co., Ltd. The main drafters of this standard. SCENCE Liu Bin, Li Jiyuan, Wu Qihua, Long Yang-sook, money Zhiping. This standard replaces the standards previously issued as follows:
 - GB/T 13180-1991. X, gamma-ray counter GM

1 Scope

GB/T 13180-2008 is the Chinese national standard on g-m counter tubes for detecting x, gamma radiation, in the field of energy and heat transfer engineering. 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 2 July 2008 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 April 2009. Classification: ICS 27.120, CCS F88. 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 Geiger - Müller counter product classifications, technical requirements, test methods, inspection rules and tubes signs, packaging, transportation, Storage methods. This standard applies to detect X, gamma-ray organic counter (referred to as organic tube) and halogen counter (referred to as the halogen tube).

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 9588-2008 Geiger - Müller counter tube test method

GB/T 10263-2006 radiation detectors Environmental conditions and testing requirements and the basic method

GB/T 12057-2001 nuclear instruments and nuclear radiation detectors Quality inspection rule

3 Terms and Definitions

GB/T 9588 and established the following terms and definitions apply to this standard.

3.1 Work area or proportional Geiger - Mueller zone pulse ionization detector.

3.2 Counter the applied voltage range, in this range gas amplification factor is large enough to make the pulse amplitude substantially counter sensitive volume Within the first generation of ions unrelated to the total.

3.3 In the avalanche area (Geiger - Mueller area) counter. NOTE. hereinafter the "counter" unless otherwise noted are by Geiger - Müller counter tube.

3.4 The inflatable body alone without taking other measures can be quenched Geiger - Müller counter tube. NOTE. For example.

--- Halogen counter;

--- Organic vapor counter.

3.5 Geiger The inflatable body contains a small amount of organic gases - Müller counter tube.

3.6 Geiger The inflatable body contains a small amount of halogen gases - Müller counter tube.

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