

ICS 17.040.30

CCS J42



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

GB/T 22093-2018

Replacing GB/T 22093-2008

Internal micrometer with electronic digital display

电子数显内径千分尺

Issued on: May 14, 2018

Implemented on: December 1, 2018

**Issued by: State Administration for Market Regulation;
Standardization Administration of China**

Table of Contents

- 1 Scope
- 2 Normative references
- 3 Terms and definitions
- 4 Type and basic parameters

Foreword

This standard was drafted in accordance with the rules given in GB/T 1.1-2009. This standard replaces GB/T 22093-2008 "Electronic Digital Internal Diameter Micrometer". This standard is compared with GB/T 22093-2008, except for editing. In addition to the series of changes, the main technical changes are as follows:

- Expand the measurement range of the electronic digital internal diameter micrometer to 1000mm (see Chapter 1, Chapter 1 of the 2008 edition);
- Modified the definition of electronic digital display digital display device (see 3.1, 3.1 edition of 2008);
- Increased the definition of the electronic digital display internal micrometer (see 3.2);
- Increased the electronic digital internal diameter micrometer with a micrometer screw pitch of 2mm (see 4.2.1);
- Added provisions for the measurement range of the electronic digital internal diameter micrometer (see 5.5);
- Revised the requirements and specified values of the maximum allowable error of the indication (see 5.13 and Table 2, 5.13 and Table 2 of the 2008 edition);
- Increased the maximum allowable error of the indication value of the electronic digital internal diameter micrometer with a range greater than 25mm (see 5.13.1);
- Increased the inspection method for the locking change of the A-type electronic digital display internal micrometer (see 6.1);
- Revised Note 2 of the Indexing Error Test Method (see 6.3.1, 6.2.1 of the 2008 edition);

1 Scope

GB/T 22093-2018 is the Chinese national standard on internal micrometer with electronic digital display, 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 14 May 2018 by the State Administration for Market Regulation; Standardization Administration of China, and has been in force since 1 December 2018. Classification: ICS 17.040.30, CCS J42. 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 terms and definitions, types and basic parameters, requirements, test methods, test methods, electronic digital internal diameter micrometers. Logo and packaging. This standard is applicable to the number of electrons with a resolution of 0.001mm, a range of less than or equal to 100mm, and an upper limit of the measurement range to 1000mm. The internal diameter is micrometer. Refer to Appendix A for the A-type electronic digital internal diameter micrometer with a measuring range of 1000mm~6000mm.

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 edition (including all amendments) applies to this document.

GB/T 1216-2018 outer diameter micrometer

GB/T 2423.3-2016 Environmental testing - Part 2. Test method test Cab. constant damp heat test

GB/T 2423.22-2012 Environmental testing - Part 2. Test methods Test N. Temperature change

GB/T 4208-2017 enclosure protection grade (IP code)

GB/T 1800.2-2009 Geometrical Product Specifications (GPS) Limits and fits. Part 2. Standard tolerance classes and Limit deviation table

GB/T 17163-2008 Geometrical quantity measuring instrument terminology basic terminology

GB/T 17164-2008 Geometric quantity measuring instrument terminology product terminology

GB/T 17626.2-2006 Electromagnetic compatibility test and measurement technology
Electrostatic discharge immunity test

GB/T 17626.3-2016 Electromagnetic compatibility test and measurement technology RF
electromagnetic field radiation immunity test

GB/T 24634-2009 Geometrical Product Specifications (GPS) General concepts and
requirements for GPS measuring equipment

3 Terms and definitions

GB/T 17163-2008, GB/T 17164-2008 and GB/T 24634-2009 define the following terms and definitions apply In this document.

3.1 Electronic digital micrometer digital display device

electronicdigitalindicatingdevicesformicrometer A device for calculating and displaying the micrometer screw displacement of an electronic digital internal diameter micrometer using sensors, electronics, and digital display technology.

Note. Hereinafter referred to as "electronic digital display device".

3.2 Electronic digital display internal micrometer

internalmicrometerwithelectronicdigitaldisplay A measuring instrument for measuring a reading of an inner dimension separated by two measuring faces or an inner bore contacting three measuring faces by means of an electronic digital display device.

4 Type and basic parameters

4.1 type The type of electronic digital display internal micrometer is shown in Figure 1 and Figure 2. The illustrations are for illustrative purposes only and do not represent a detailed structure.