

ICS 37.020
CCS N 32



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

GB/T 19864.1-2013

Replacing GB/T 19864.1-2005

**Stereomicroscopes -- Part 1: Stereomicroscopes for general
use**

体视显微镜 第1部分：普及型体视显微镜

(English Translation)

Issued on: December 17, 2013

Implemented on: July 15, 2014

Issued by: Standardization Administration of China

Table of Contents

- Foreword
- 1 Scope
- 2 Normative references
- 3 Basic parameters
- 4 Eyepiece diopter adjustment range (diopter) -5 to 5

Foreword

GB/T 19864 "stereo microscope" is divided into two parts.

--- Part 1. universal stereo microscope;

--- Part 2. High performance stereo microscope.

This section GB/T Part of 119,864.

This section drafted in accordance with GB/T 1.1-2009 given rules.

This Part replaces GB/T 19864.1-2005 "stereomicroscope Part 1. universal stereo microscope." This portion GB/T 19864.1-2005 main changes are as follows.

--- Chapter 1 increases the scope of application;

--- Change the name of the original standard 4.1.4. image object plane deviation in the center of the left and right center of the field;

--- 4.1.5 name to the original standard. about the optical system of the light beam direction deviations;

--- Remove the "objective multiple switchable stereo microscope, after the transformation of different multiples lens, the former center of the field as the object point in the image plane the offset within the type of continuous zoom stereo microscope requirements ";

--- Resolution lens center of the field increased to not less than 2000NA line pairs/mm;

--- Electrical safety performance of the pressure test requirements and methods for increasing the DC test.

This part of ISO 11884-1:2006 "minimum requirements for optics and photonics stereomicroscope - Part 1. General Purpose STEREOLOGY Microscope "is not equivalent. This part of ISO 11884-1:2006 The main differences are as follows.

--- Increasing the basic parameters of the instrument;

- Press accustomed to "optical and mechanical properties" table format to the requirements of the provisions of narration;
- In the "optical and mechanical properties" section adds about clear imaging, the basic requirements of the transmission mechanism, lighting, cleaning, etc.;
- Increase the requirements for the appearance of the instrument;
- Environmental testing provides only under conditions of transport packaging for environmental adaptability requirements.

This part is proposed by China Machinery Industry Federation.

This part of the National Standardization Technical Committee on Photonic and Optical Science (SAC/TC103) centralized.

This section is drafted. Shanghai Polytechnic University, Wuzhou Oka Optical Instrument Co., Ltd., Ningbo City, teaching Instrument Co., Ltd., Nanjing East Lee to Photoelectric Industrial Co., Ltd. Ningbo Sunny Instruments Co., Ltd. Ningbo Huaguang Precision Instrument Co., Ltd., Ningbo Yongxin Optics Company Limited Division Nanjing Jiangnan Yong new Optical Co., Ltd., Ningbo Cham Beijing Optical Instrument Co., Mike Audi Industrial Group Co., Ltd., Guangzhou, Guangdong was light Science Instrument Co., Ltd., Guiyang Xintian Optoelectronics Technology Co., Ltd., Chongqing Optical Instrument Co., Ltd.

1 Scope

GB/T 19864 provisions of this part of the universal stereo microscope (hereinafter referred to as the microscope) of the basic parameters, requirements, test methods, Inspection rules, marking, packaging, and transportation and storage.

This section applies to non-continuous zoom stereo microscope.

This section does not apply to continuous zoom stereo microscope and surgical microscope.

2 Normative references

The following documents for the application of this document is essential. For dated references, only the dated version suitable for use herein Member. For undated references, the latest edition (including any amendments) applies to this document.

GB/T 2828.1 Sampling procedures for inspection - Part 1. by acceptance quality limit (AQL) retrieval batch inspection sampling plan GB/T 2829 periodic inspection Sampling procedures and tables (suitable for process stability test) GB 4793.1-2007 measurement, control and laboratory safety requirements for electrical equipment - Part 1. General requirements GB/T 9246 microscope eyepiece GB/T 13384 mechanical and electrical

products packaging General technical conditions GB/T 19863 Test Method
stereomicroscope GB/T 22056 and the eyepiece of the microscope objective signs GB/T
25480 Instrumentation transportation, storage and basic environmental conditions and test
methods

3 Basic parameters

3.1

The basic parameters of the microscope should be consistent with Table 1.

Table 1

No. The basic parameters of the project 1 eyepiece and eyepiece connection size a/mm
phi30 (30.5) F8 h8 ; Phi23.2 F8 h8 ; Phi34 F8 h8 2 eyepiece magnification according to
GB/T 9246 provisions choice

3 Binocular IPD adjustment range/mm minimum pupil distance of not more than 55, the
maximum pupillary distance is not less than 75

4 Eyepiece diopter adjustment range (diopter) -5 to 5

a microscope according to the size of the model to select one size.