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JY

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

JY/T 0116-2011

Replacing JY 116-1982

**E10 screw socket for teaching
(English Translation)**

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Foreword

This standard was drafted in accordance with the rules given in GB/T 1.1-2009.

This standard replaces JY 116-1982. In addition to editorial changes, the main technical requirements of this standard have changed as follows.

- Improved the requirements of the center contact of the lamp holder, using elastic electrodes instead, and defining the telescopic range;
- Added the requirement that two or more metals, metal coatings and chemical treatment layers should not be selected as contact couples;
- Remove the bayonet and screw sockets, only the screw sockets are retained;
- Removed the description that the light bulb should not shake after the light bulb is screwed into the lamp holder, and after the power is turned on, the beads should glow normally and should not flicker;
- Modified the requirements of the terminal;
- Revised requirements for insulation resistance and electrical strength;
- Revised environmental tests;
- Changed the sampling method for percentage sampling.

Please note that some elements of this standard may involve patents. The issuer of this standard is not responsible for identifying these patents.

This standard was proposed by the National Technical Committee for Standardization of Teaching Instruments (SAC/TC125).

This standard is under the jurisdiction of the National Technical Committee for Standardization of Teaching Instruments (SAC/TC125).

The main drafting organizations of this standard. Educational Equipment and Information Center of Jiaxing City, Zhejiang Province, and Educational Technology Center of Zhejiang Province.

1 Scope

This standard specifies the classification and nomenclature, requirements, test methods, inspection rules, signs, labels, packaging, Transportation and storage.

This standard applies to E10 screw sockets with a working voltage of less than 36V used in primary and middle school teaching experiments.

2 Normative references

The following documents are essential for the application of this document. For dated references, only the dated version applies to this document.

For undated references, the latest version (including all amendments) applies to this document.

GB 8898-2001 audio, video and similar electronic equipment safety requirements GB 19148.1-2008 Types and dimensions of lampholders Part 1 Screw-type lampholders JY 0001-2003 General quality requirements for teaching instruments and equipment products JY 0002 Inspection rules for teaching instruments and equipment products JY 0026-1991 teaching instrument and teaching equipment product model naming method JY 0009-1990 Environmental requirements and test methods for electronic equipment for teaching

3.1 Naming rules

The product is named according to the provisions of JY 0026-1991.

3.2 Nomenclature

Models of teaching lamp holders are named.

DT-DZ-L-E10

Product specifications, lamp holder specifications, E10 Product feature code, L (screw) Product name Pinyin prefix, lamp holder Product model classification code, electrical general instrument Model example.

DT-DZ-L-E10 stands for screw socket, the specification is E10, general electrical instrument.

4.1 Conditions of use

Relative humidity. $\leq 90\%$.

4.2 Structure

4.2.1

The product shall consist of a base, binding posts and lamp holders.

4.2.2

E10 screw sockets shall be used.

4.2.3

The base shall be made of hard insulating material, and the surface shall be flat and

smooth.

4.3 Lampholder

4.3.1

The lampholder shall comply with the E10 lampholder of GB 19148.1-2008.

4.3.2

The maximum working voltage of the lamp holder shall be 36V, and the maximum working current shall be 2.5A.

4.3.3

The lamp holder ring should be made of brass material with a thickness of 0.4mm ~ 0.5mm, and the center contact should be made of phosphor copper material with a thickness of 0.3mm ~ 0.4mm Production. The lamp holder and the two terminals shall be connected by wires or copper sheets. Where two or more metals, metal coatings, and chemically treated layers come into contact Bits shall comply with JY 0001-2003 Section 6.10.

4.3.4

The center contact of the lamp holder shall be an elastic electrode, and the elastic extension range (distance to the upper edge of the screw mouth) shall be 7.5mm ~ 9.3mm.

4.4 Base

4.4.1

The external dimensions of the base shall be not less than 75mm, 35mm, and 10mm, and the wall thickness shall not be less than 3mm.

The center-to-center distance of the pole mounting holes should not be less than 40mm.

4.4.2

The electrical strength of the base shall be 850V (peak).

4.5 Terminal

4.5.1

The outer diameter of the terminal should be not less than 10mm, the fixed screw M4, the stroke of the terminal cap should be not less than 6mm, and it should be plugged for dual use.

Note: In addition to connecting wires, you can insert a plug in the middle of the terminal cap.

4.5.2

There should be anti-loosing spring washers at the fixed position between the terminal and the base. The terminal cap should not be unscrewed from the terminal.