

## 1. Test Probe A of IEC 61032



### Specification:

IP1X Probe A /Test Probe A

- 1, According to: IEC 61032:1997 / IEC 60529:2001 and UL;
- 2, Test Probe A is necessary appliance for household and similar electrical appliance of against electric shock protection test.

### Technical Parameters:

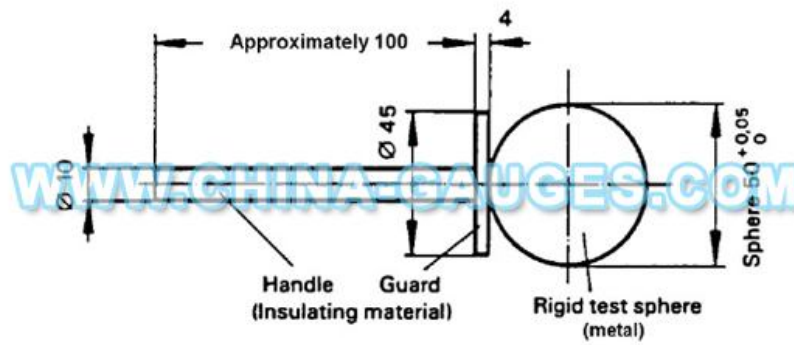
1. Ball Diameter: 50mm
2. Baffle Plate Diameter: 45mm
3. Baffle Plate Thickness: 4mm
4. Handle Diameter: 10mm
5. Handle Length: 100mm
6. According to IEC 61032 figure 1 (the Test probe A), table 6.

### Application:

- 1, Sphere can not touch the live parts or close to the dangerous parts.
- 2, In the testing requirements of keep close to the dangerous part, the test steel ball without thrust need to be used with push tension meter, and steel body for protective coating need to apply to  $50 + 5 n (30 + 3 n)$  thrust.



a)



*Dimensions in millimetres*

This probe is intended to verify the protection of persons against access to hazardous parts. It is also used to verify the protection against access with the back of the hand.

**Figure 1 – Test probe A**



## 2. Test Probe B of IEC 61032



The Jointed Test Finger is a precision test probe made according to Figure 2 (Fig. 2) of the IEC 61032 (Test probe B) and is used to simulate a human finger. It is also used by the standards of CSA, IRAM, UL and in most of the rules involved in the verification of accessibility to live parts.

### Technical Parameters:

1. Knurled Finger Diameter:12 mm
2. Knurled Finger Length:80 mm
3. Baffle Plate Diameter:50 mm
4. Baffle Plate Length:100 mm
5. Baffle thickness:20 mm

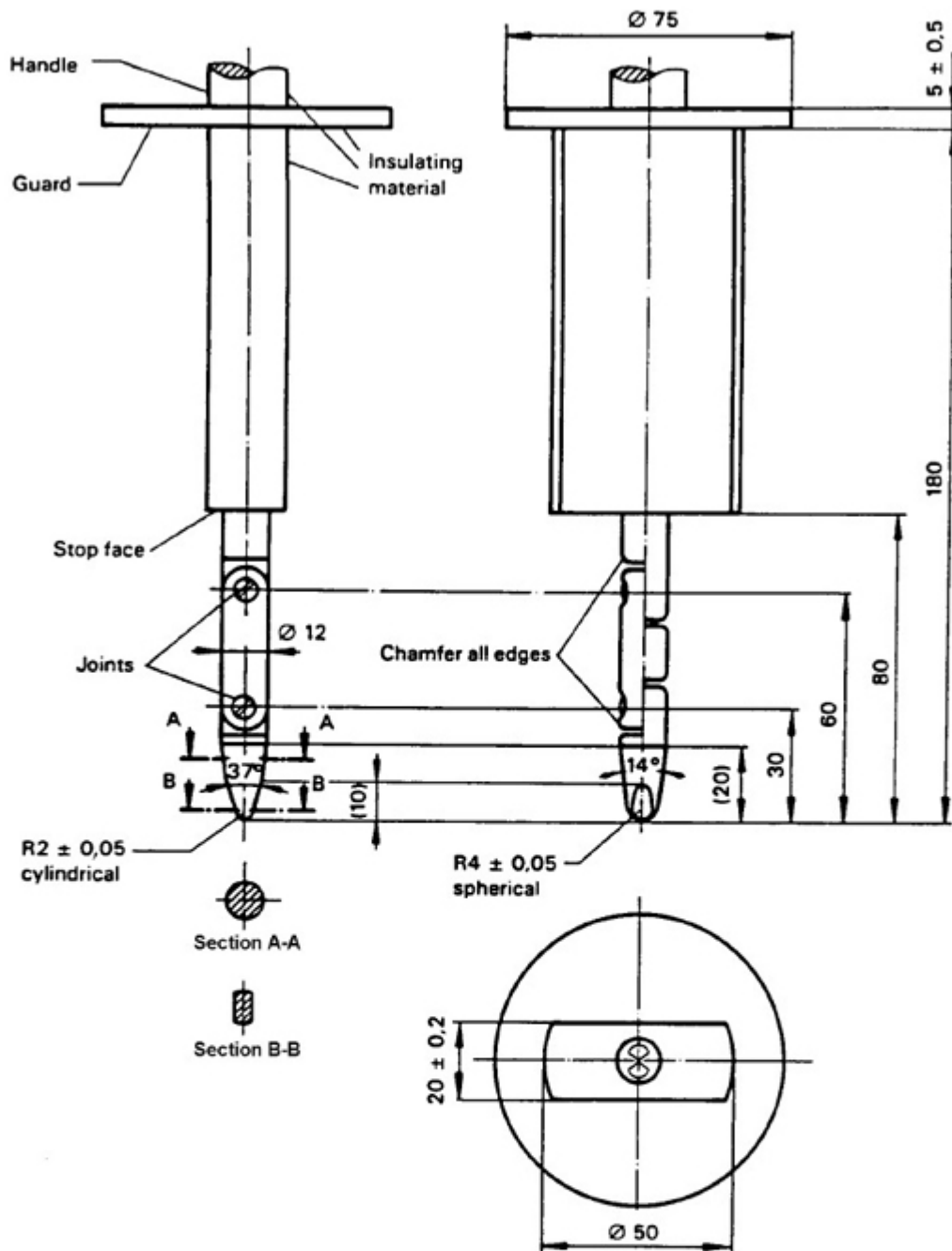
### Application:

1. The joint part of The Standard Test Knurled Finger Probe can't touch the live parts or close to the dangerous parts, and50 mmto20 mmbaffle plate cannot enter.
2. In the prevent electric shock test, wirings , power devices, and lighting devices are needed.

### Notes:

Both joints shall permit movement in the same plane and the same direction through an angle of 90o with a 0o to +10o tolerance.

b)



*Dimensions in millimetres*

Material: metal, except where otherwise specified.

Tolerance on dimensions when no specific tolerance is given:

– on angles:  $\begin{matrix} 0 \\ -10^\circ \end{matrix}$

– on linear dimensions: up to 25 mm:  $\begin{matrix} 0 \\ -0,05 \end{matrix}$  mm; over 25 mm:  $\pm 0,2$  mm.

Both joints shall permit movement in the same plane and the same direction through an angle of  $90^\circ$  with a  $0^\circ$  to  $+10^\circ$  tolerance.

This probe is intended to verify the basic protection against access to hazardous parts. It is also used to verify the protection against access with a finger.

**Figure 2 – Test probe B**



### 3. Test Probe C of IEC 61032



#### **Basic Introduction:**

1. According to: IEC 61032:1997 / IEC 60529:2001 / IEC 60065 / IEC 60598 and UL
2. IP3X Test Probe C ( Test Probe C) is the necessary tool to proceed protecting electric shock test of household and similar electrical appliances.

#### **Technical parameters:**

1. Rod length: 100 mm
2. Rod diameter: 2.5 mm
3. Circular-baffle diameter: 35 mm
4. Handle diameter: 10 mm
5. Handle length: 100 mm
6. According to IEC 61032 figure 3 (the Test probe C).

#### **Application:**

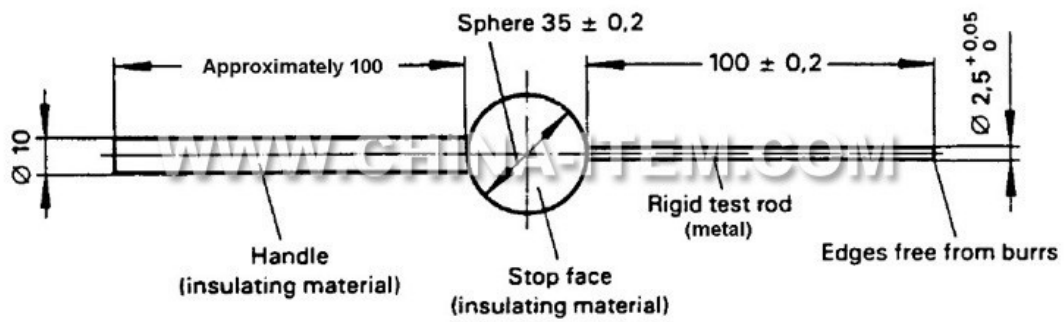
1. Standard test refers to the joint part can't touch the live parts or close to the dangerous parts. and 35mm circular baffle can not be enter.
2. In the test requirement for preventing access to the hazardous parts. Test Probe C need to be with push force  $3\pm 0.3N$ .

#### **Purpose:**

This probe is intended to verify the basic protection against access to hazardous parts. It's also used to verify the protection against access with a tool.

#### **Note:**

For without thrust products, please use with the push tension dynamometer.





#### 4. Test Probe D of IEC 61032



##### **Basic Introduction:**

1. According to: IEC 61032:1997 / IEC 60529:2001 / IEC 60065 / IEC 60598 and UL
2. IP4X Test Probe D ( Test Probe D) is the necessary tool to proceed protecting electric shock test of household and similar electrical appliances.

##### **Technical parameters:**

1. Wire length: 100 mm
2. Wire diameter: 1.0 mm
3. Circular-baffle diameter: 35 mm
4. Handle diameter: 10 mm
5. Handle length: 100 mm
6. According to IEC 61032 figure 4 (the Test probe D).

##### **Application:**

1. Standard test refers to the joint part can't touch the live parts or close to the dangerous parts. and 35mm circular baffle can not be enter.
2. In the test requirement for preventing access to the hazardous parts. Test Probe D need to be with push force  $1\pm 0.1N$

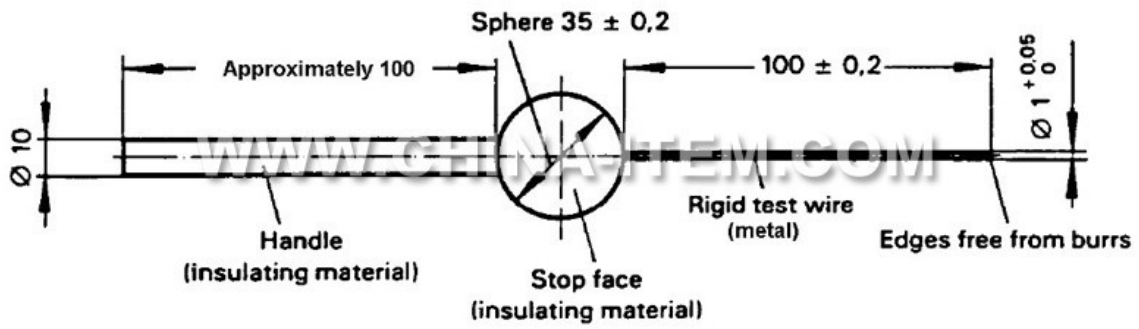
##### **Purpose:**

This probe is intended to verify the basic protection against access to hazardous parts. It's also used to verify the protection against access with a tool.

##### **Note:**



For without thrust products, please use with the push tension dynamometer.





## 5. Test Probe 1 of IEC 61032



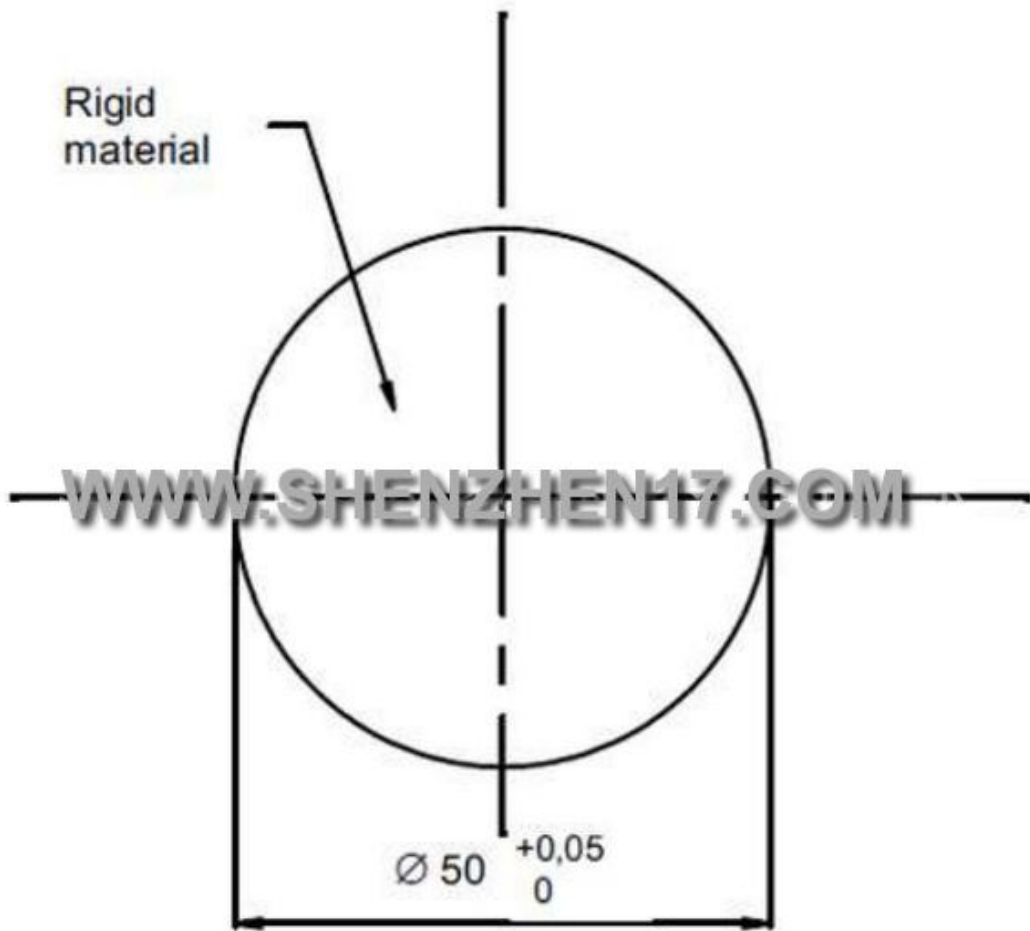
### **Application:**

The Rigid Sphere (50mm) is designed and manufactured to perform the test specified in many standards (IEC 60335, IEC 60065, IEC 60745, IEC 61029, IEC 60950) .

Its is designed to meet the requirements of international safety regulatory agencies such as UL, DNV, IMQ, BVSQ, ITS, IRAM , CSA, VDE, DIN , INMETRO.

### **Technical parameters:**

1. Ball diameter: 50 mm
2. Ball weight: 510g + 10g
3. the reference standards: IEC61032 in Figure 5 (Test Probes 1)





## 6. Test Probe 2 of IEC 61032



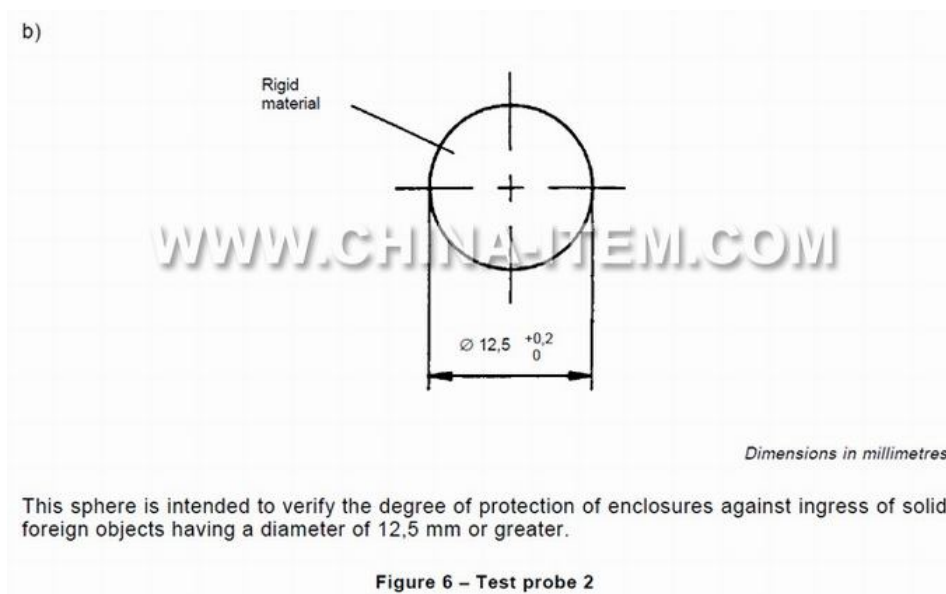
### Application:

The rigid sphere (12.5 mm) is designed and manufactured to perform the test specified in many standards.

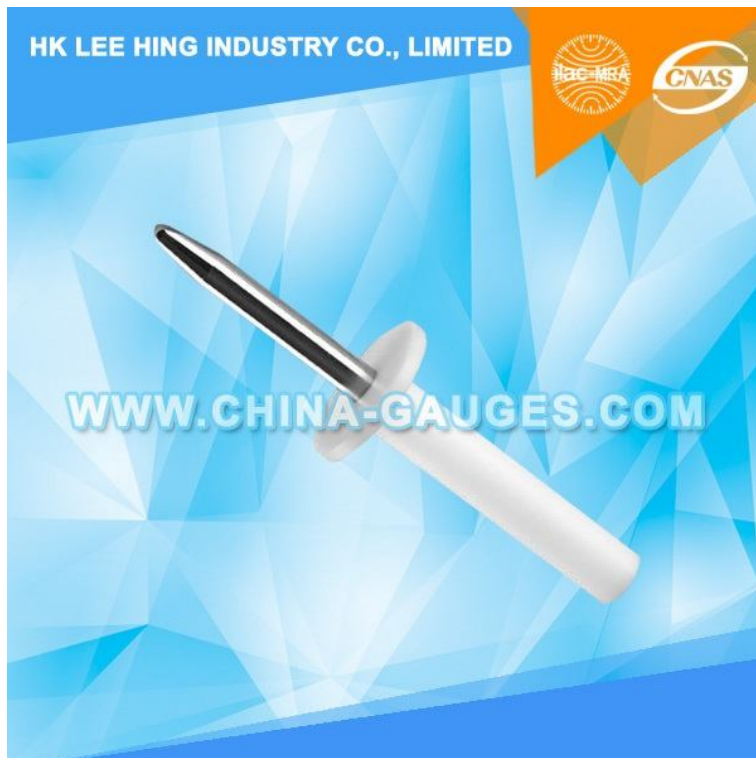
It is designed to meet the requirements of international safety regulatory agencies such as UL, DNV, IMQ, BVSQ, ITS, IRAM, CSA, VDE, DIN, INMETRO.

### Technical parameters:

1. Ball diameter: 12.5 mm
2. Ball weight: 15g + 2g
3. the reference standards: IEC61032 in Figure 6 (Test Probe 2).



## 7. Test Probe 11 of IEC 61032



### **Specification:**

The **Rigid Test Finger** is a precision test probe made according to **Figure 7 (Fig. 7) of the IEC 61032 (Test probe 11)** and is used to simulate a human finger.

It is also used by the standards of CSA, IRAM, UL and in most of the rules involved in the verification of accessibility to live parts.

### **Technical Parameters:**

Nodular Finger length: 80 mm

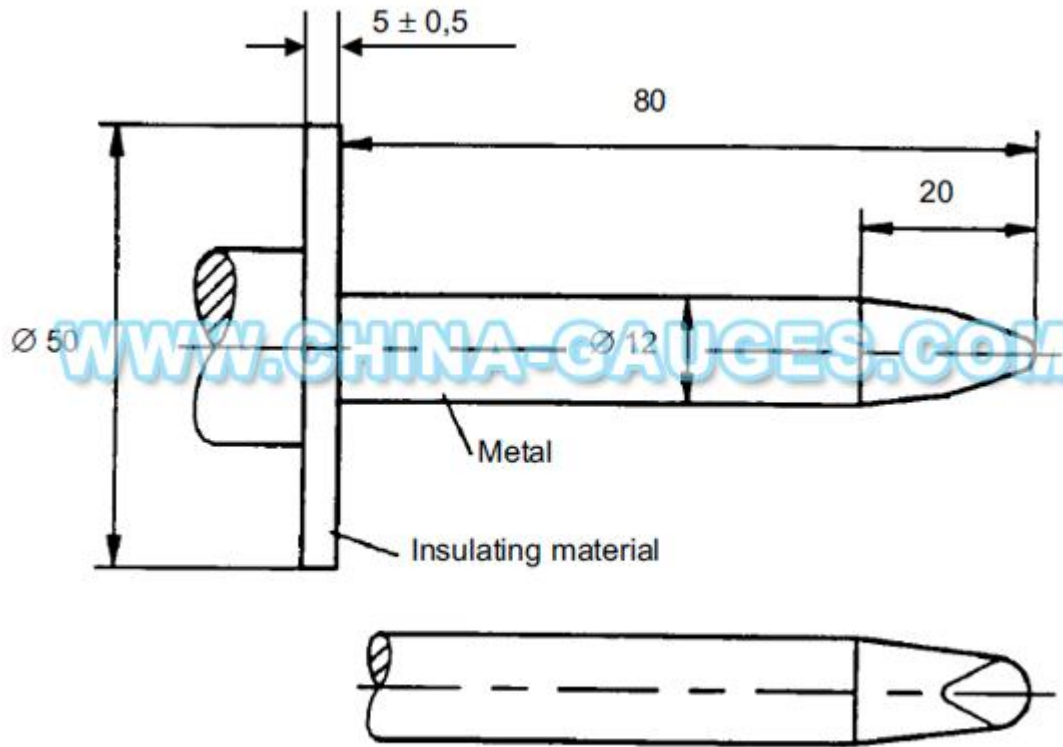
Nodular Finger diameter: 12 mm

Dam-board diameter: 50 mm

Dam-board thickness: 5 mm

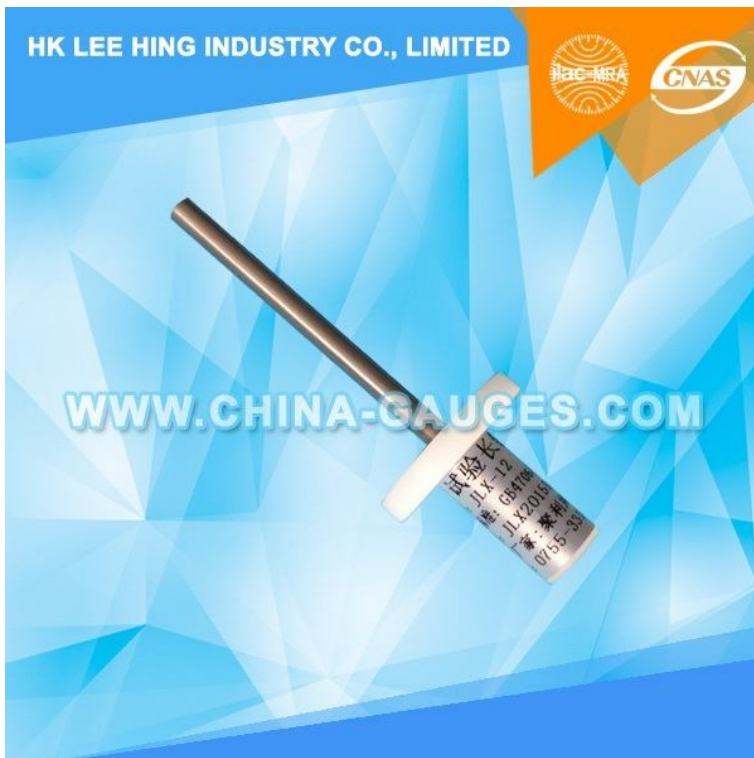
Material: Nylon and stainless steel

**According to:** IEC 61032, IEC 60335-1, IEC60065, IEC60884-1, IEC60238, IEC60950, IEC61010.





## 8. Test Probe 12 of IEC 61032



### **Appliance:**

It's the necessary tool to proceed protecting electric shock test of household and similar electrical appliances.

### **Purpose:**

This pin probe is intended to be used on appliances for verifying the inaccessibility of hazardous live parts or hazardous mechanical parts which are liable to be touched accidentally by a tool, for example a screwdriver or similar pointed object in normal use.

### **The Long Test Pin (Figure 8 - Test probe 12) of IEC 61032.**

This pin is intended to be used on appliances for verifying the inaccessibility of hazardous live parts or hazardous mechanical parts which are liable to be touched accidentally by a tool, for example a screwdriver or similar pointed object in normal use.

### **Technical Parameters:**

Test probe diameter: 4 mm

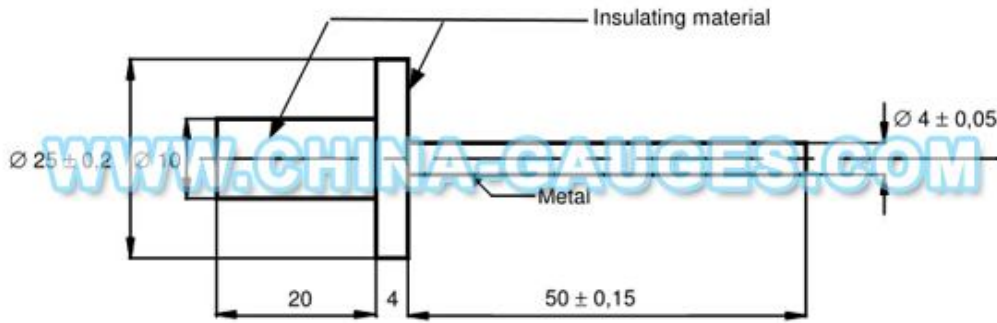
Test probe length: 50 mm

Dam-board diameter: 25 mm

Dam-board thickness: 4 mm

Material: Handle is made of Nylon, tip is stainless steel.

**According to:** Figure 8 (Test Probe 12) of IEC 61032



*Dimensions in millimetres*

This pin is intended to be used on appliances for verifying the inaccessibility of hazardous live parts or hazardous mechanical parts which are liable to be touched accidentally by a tool, for example a screwdriver or similar pointed object in normal use.

**Figure 8 – Test probe 12**



## 9. Test Probe 13 of IEC 61032



### Specification:

This Test Probe Pins (**Figure 9 - Test probe 13 of IEC 61032**) is intended to verify the protection against access to hazardous live parts in class 0 equipment and class II equipment (see IEC60536).

**According to:** IEC 61032, IEC 60065, IEC 60335-1, IEC 60950, IEC 60745.

### Technical Parameter:

Test probe diameter: 3 mm

Test probe length: 15 mm

Baffle plate thickness: 4 mm

Baffle plate diameter: 25 mm

Handle length: 20 mm

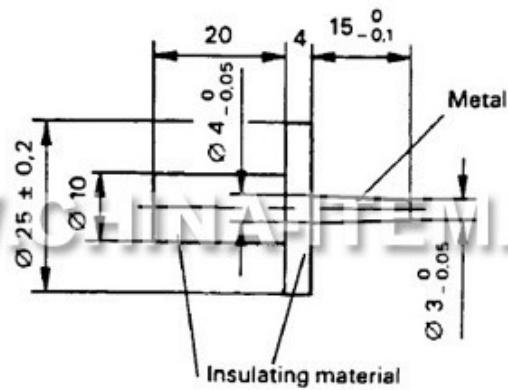
Handle diameter: 10 mm

Material: Handle is made of Nylon, tip is stainless steel.





c)



*Dimensions in millimetres*

This pin is intended to verify the protection against access to hazardous live parts in class 0 equipment and class II equipment (see IEC 60536).

**Figure 9 – Test probe 13**



## 10. Test Probe 18 of IEC 61032



### **Specification:**

This probe is intended to simulate access to hazardous parts by children of more than 36 months and less than 14 years.

IEC 61032 Figure 12 – Test probe 18 (small finger probe  $\varnothing$  8,6)

**According to:** IEC 61032-1997, EN71, ASTM F963.

### **Technology Parameter:**

Knurled finger diameter: 8.6 mm

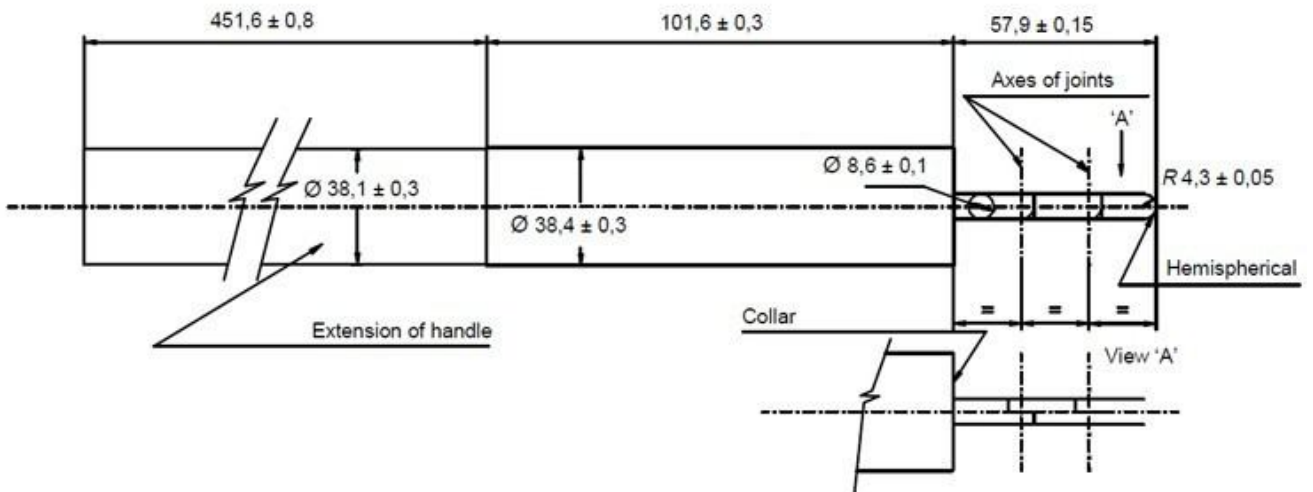
Head radius: 4.3 mm

Knurled finger length: 57.9 mm (three knurls, 19.3 mm/knurl)

Material: Nylon and stainless steel



f)



## 11. Test Probe 19 of IEC 61032



### **Specification:**

This probe is intended to simulate access to hazardous parts by children of 36 months or less.

IEC 61032 Figure 13 – Test probe 19 (small finger probe  $\varnothing$  5,6)

**According to:** IEC 61032-1997, EN71, ASTM F963.

### **Technology Parameter:**

Knurled finger diameter:  $\varnothing$ 5.6 mm

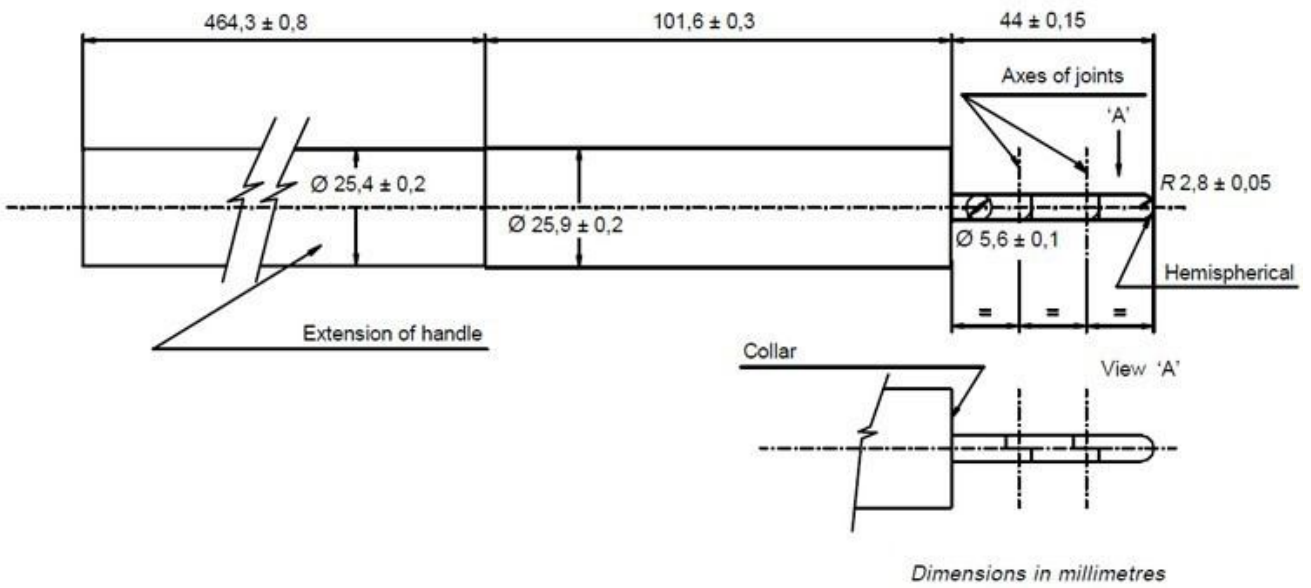
Head radius: 2.8 mm

Knurled finger length: 44 mm (Three knurls, 16.7 mm knurl)

Material: Nylon and stainless steel



g)



## 12. Test Probe 31 of IEC 61032



### **Specification:**

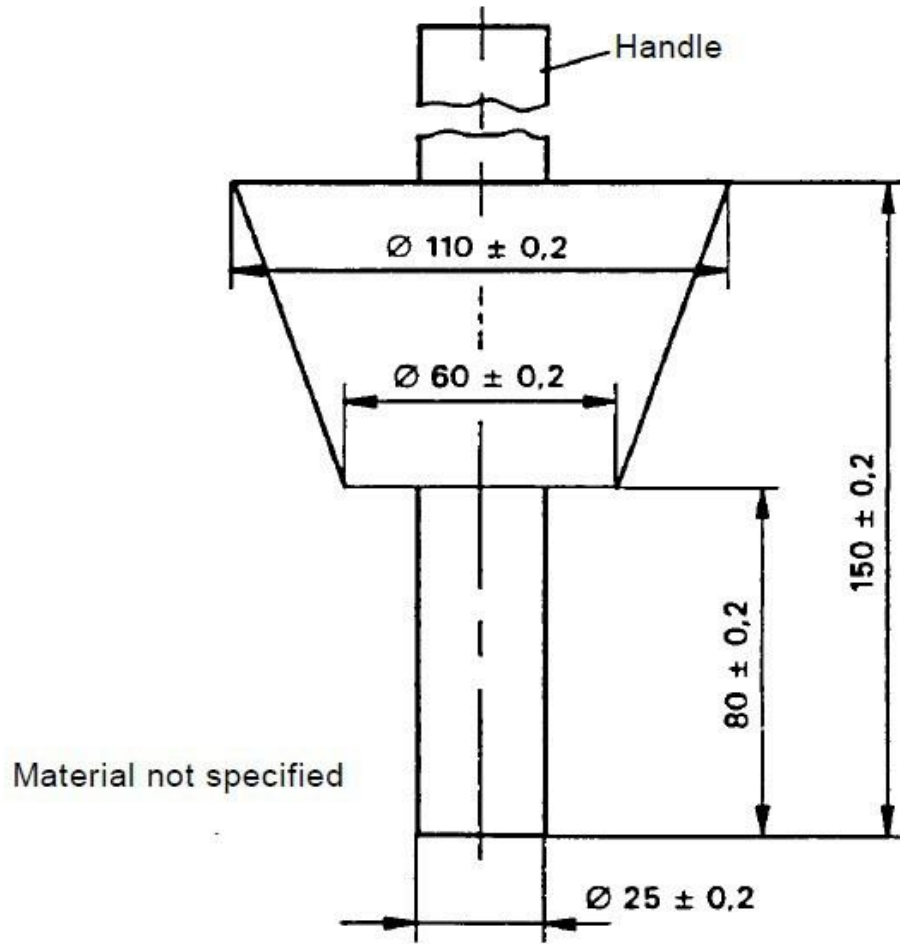
This probe is intended to verify the protection against access to hazardous mechanical parts of the grinding system of food waste disposal units.

The Test Probe 31(Grinding Probe) is mainly used to check the hazardous machinery parts of the residual food dealing devices' grinding system whether be touched in .

**According to:** IEC61032-1997 Figure 14.

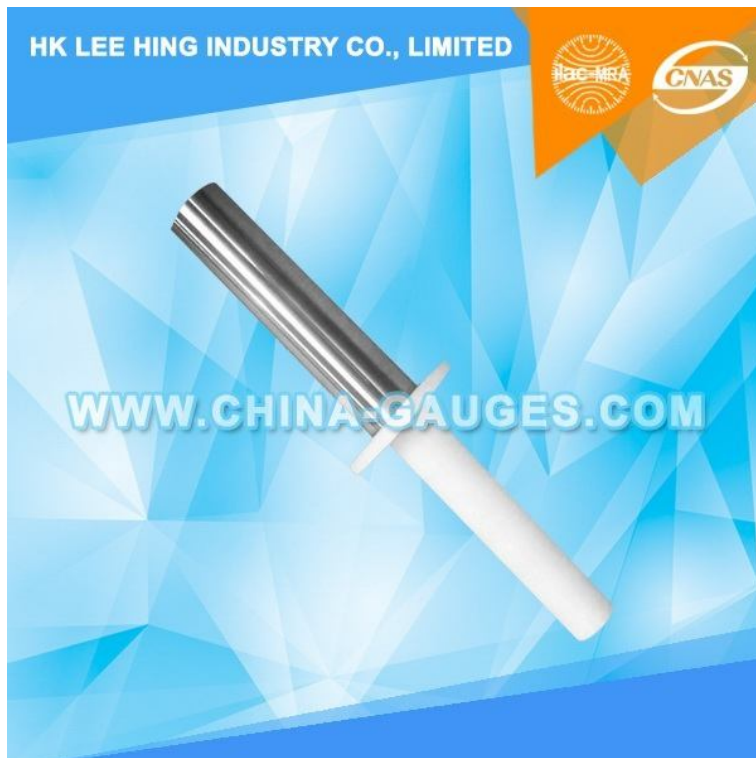
### **Technical Parameters:**

1. Rod Diameter:  $\Phi 25$  mm
2. Rod Length: 80 mm
3. Plate Former Diameter:  $\Phi 60$  mm
4. Plate Back Diameter:  $\Phi 110$  mm
5. Total Length: 150 mm





### 13. Test Probe 32 of IEC 61032



**Specification:**

This rod is intended to verify the protection provided by fan guards against access to hazardous mechanical parts.

**According to:** IEC61032-1997 Figure 15.

**Technical Parameter:**

Test Rod diameter:  $\varnothing 25$  mm

Dam-board diameter: 50 mm

b)



*Dimensions in millimetres*

This rod is intended to verify the protection provided by fan guards against access to hazardous mechanical parts.

**Figure 15 – Test probe 32**





## 14. Test Probe 41 of IEC 61032



### **Specification:**

This probe is intended to verify the basic protection against access to glowing heating elements (Incandescent heating elements).

Probes intended to verify the protection of persons against access to hazardous hot or glowing parts.

**According to:** IEC61032-1997 Figure 16.

The **Test Cone** is made in stainless steel.

### **Technical Parameter:**

Handle length: 80mm

Handle diameter: 50mm

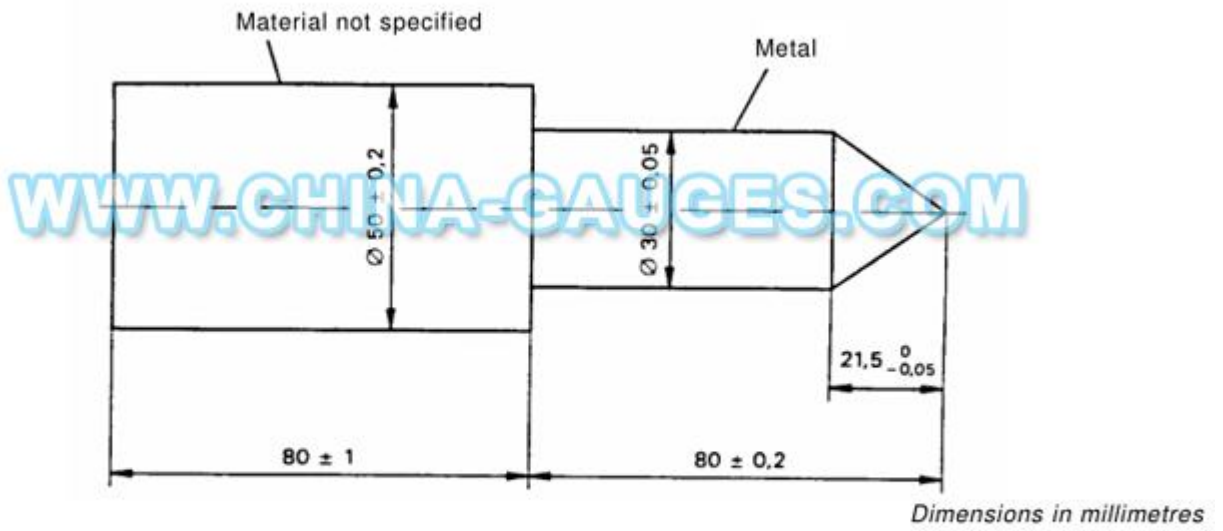
Test probe length: 80mm

Test probe diameter: 30mm

Test thorn length: 21.5mm



a)



This probe is intended to verify the protection against access to glowing heating elements.

Figure 16 – Test probe 41



## 15. Test Probe 43 of IEC 61032



### Specification:

This bar is intended to verify the protection of fixed and portable visibly glowing radiant heaters.

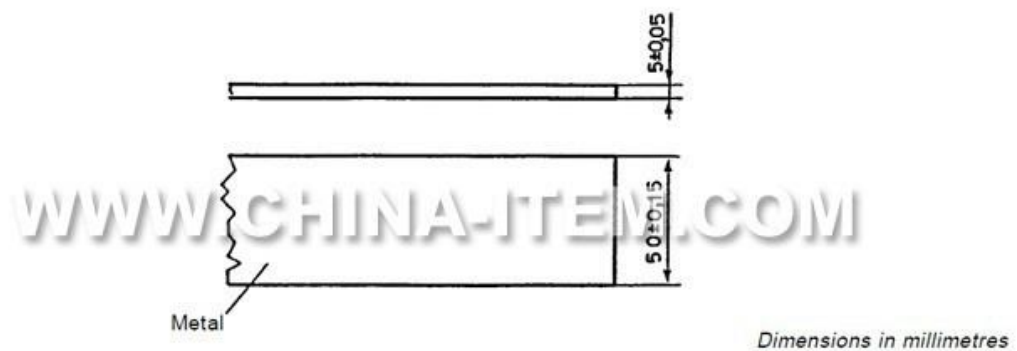
According to: IEC 61032-1997 Figure 17.

### Technical Parameter:

Test bar diameter: 50mm

Test bar thickness: 5mm

b)



This bar is intended to verify the protection of fixed and portable visibly glowing radiant heaters.

Figure 17 – Test probe 43