



ISRAEL STANDARD

SI 32

Part 1.1

THE STANDARDS INSTITUTION OF ISRAEL

January 2005

This is a true translation of the Hebrew original. In any case of discrepancy between the original Hebrew text and the English translation, the Hebrew version shall prevail

This Standard, excluding the modifications and additions indicated, is identical to the International Standard IEC 60884-1 Third edition: 2002-6.

This Standard supersedes:  
Israel Standard SI 32 of November 1988  
Amendment 1 of September 1989  
Amendment 2 of July 1993  
Amendment 4 of November 2000  
Amendment 5 of March 2003

Note:

Amendment 3 was not published

**PLUGS AND SOCKET-OUTLETS FOR HOUSEHOLD AND  
SIMILAR PURPOSES: PLUGS AND SOCKET-OUTLETS FOR  
SINGLE PHASE UP TO 16A – GENERAL REQUIREMENTS**

(Translation)

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**Descriptors:** plugs, socket outlets, electrical household appliances, electrical testing, adapters, dimensions, electric connectors, electrical components

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Note: A document appearing in the "Reshumot" as an "Amendment sheet" may be a separate  
Amendment sheet, or an Amendment incorporated into the Standard

## **Introduction to the Israeli Standard**

This Israel Standard is the Standard of the International Electrotechnical Commission IEC 60884-1 (Third edition) from June 2002 approved as an Israel Standard with modifications and additions.

The International Standard IEC 60884-1 was divided, for technical reasons, into two Israel Standards: SI 32 Part 1.1 and SI 32 Part 1.2, as follows:

Part 1.1 - applies to plugs and socket outlets for single phase up to currents of 16A, but it also includes safety aspects and tables referring to Part 1.2;

Part 1.2 - applies to plugs and socket outlets for triple phase up to currents of 32A.

The following elements of the Standard are brought in the order given below:

- The Scope clause with modifications and additions (in Hebrew).
- Details of the modifications and additions to the Clauses of the International Standard (in Hebrew).
- Translation of the Hebrew part of the Standard (into English).
- The International Standard is brought verbatim.

Additional clauses and figures that do not appear in the International Standard IEC 60884-1, are numbered in this Standard from 201 or from the decimal number X.201.

This Standard is part of a Standard series applicable to plugs and socket outlets for household and similar purposes.

The parts of the series are:

SI 32 Part 1 1 - Plugs and socket outlets for household and similar purposes: Plugs and socket outlets for single phase up to 16A – General requirements

SI 32 Part 1 2 - Plugs and socket outlets for household and similar purposes: Plugs and socket outlets for triple phase up to 32A – General requirements

SI 32 Part 2.5 - Plugs and socket outlets for household and similar purposes: Particular requirements for adaptors

## **Scope (Clause 1 of the International Standard with modifications and additions)**

### **Note:**

The modifications and additions to this Clause are brought in a different font.

This Part of Israel Standard SI 32 (Part 1.1) applies to plugs and fixed or portable socket outlets (hereinafter, accessories) for alternating current only, with or without earthing contact with a rated voltage greater than 50 V but not exceeding 250 V and a rated current not exceeding 16 A, intended for household and similar purposes, either indoors or outdoors.

The rated current is limited to 16 A maximum for fixed socket-outlets provided with screwless terminals.

This Standard does not cover requirements for flush mounting boxes: however, it covers only those requirements for surface-type mounting boxes which are necessary for the tests on the socket-outlet.

**Note 1:**

General requirements for mounting boxes are given in Israel Standard SI 145.

This Standard also applies to plugs incorporated in cord sets, to plugs incorporated in connection systems, on cord extension sets not longer than 100 m<sup>(\*)</sup> and to portable plugs and socket-outlets with one or a few outlets incorporated in cord extension sets (see Fig. 1).

This Standard also applies to plugs and socket-outlets which are a component of an appliance, unless otherwise stated in the Standard for the relevant appliance.

This Standard does not apply to:

- plugs for appliances and pins for appliances covered by Israel Standard SI 105;

**Note 1.201:** Israel Standard SI 105 was cancelled and is approved only for spare parts and not for new equipment.

- plugs, socket-outlets and couplers for industrial purposes, covered by all parts of Israel Standard SI 1109;
- plugs and socket-outlets in couplers for electrical appliances for household and similar purposes, covered by Israel Standard SI 1110;
- plugs, fixed and portable socket-outlets for ELV.

**Note 2:** ELV values are specified in the Electricity Regulations

- fixed socket-outlets combined with fuses, automatic switches, etc, covered by Israel Standard SI 1419 Part 3.

- **Note 3:** Socket-outlets with pilot lights are allowed provided that pilot lights comply with the relevant Standard, if any

Plugs and fixed or portable socket-outlets complying with this Standard are suitable for use at ambient temperatures not normally exceeding 25 °C, but occasionally reaching 35 °C.

**Note 4:** Socket-outlets complying with this Standard are only suitable for incorporation in equipment in such a way and in such a place that it is unlikely that the surrounding temperature exceeds 35 °C

This Standard also applies to plugs and socket-outlets that contain additional components or accessories not specified here in the scope of the Standard. Additional components or accessories included in plugs and socket-outlets shall comply with the relevant Israel Standards, and if these are lacking, with the International or other Standards.

**Note 1.202:** For socket-outlets with switches for the socket-outlets, International Standard IEC 60884-2-3 shall apply, where applicable. A switching outlet may also be assembled as follows: socket-outlet complying

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(\*) The note is not relevant to the translation

with the requirements of Israel Standard SI 32 Part 1.1 (this Standard) and a suitable switch, if applicable, complying with the requirements of Israel Standard SI 33.

Components or accessories contained in plugs or socket-outlets for which there is no specific Standard, shall comply, as much as is applicable, with the applicable general safety Standard, as follows:

- Electrical equipment shall comply with Israel Standard SI 900;
- Electronic equipment shall comply with Israel Standard SI 250.

This Standard also applies to reinforced plugs and socket-outlets having a reinforced construction.

In locations where special conditions prevail, such as in ships, vehicles and the like and in hazardous locations, for example where explosions are liable to occur, special constructions may be required.

After 6 months from the publication of this revision, plugs with flat pins (see Fig. 209 in the Standard) shall no longer be in compliance with the requirements of the Standard. Flat pins shall be permitted in the future on special purpose plugs only, in compliance with Fig. 216.

## **Details of the modifications and additions to the Clauses of the International Standard**

### **2. Normative references**

- See the Clause, Normative references in the International Standard.
- The following Israel Standards are applicable in place of some of the International Standards specified in the Clause of Normative references in this Standard, as follows:

The referenced International Standard	The substituted Israel Standard	Remarks
IEC 60227, all parts	SI 473, all parts – Cables, cords and insulated conductors for nominal voltage up to 1000 V	The Israel Standard is original and is not based on foreign series
IEC 60245, all parts		
IEC 60423 – 1993	SI 728 – Plastics pipes for electric installations and communications in buildings	The Israel Standard is original and is not based on the foreign Standard
IEC 60529 – 1989	SI 981 – Classification of degrees of protection provided by enclosures of electric equipment	The Israel Standard is original and is not based on the foreign Standard
IEC 60999-1 – 1999	SI 60999 Part 1 – Connecting devices – electrical copper conductors – safety requirements for screw-type and screwless-type clamping units: general requirements and particular requirements for clamping units for conductors from 0.2 mm <sup>2</sup> up to 35 mm <sup>2</sup> (included)	The Israel Standard is identical, excluding modifications and additions to the International Standard
ISO 1456 – 1988	SI 258 – Electroplated coatings of nickel plus chromium and of copper plus nickel plus chromium	The Israel Standard is original and is not based on the foreign Standard
ISO 2081 – 1986	SI 265 – Zinc electrolytic coatings on ferrous metals	The Israel Standard is original and is not based on the foreign Standard
ISO 2093 – 1986	SI 267 – Electroplated coatings of tin	The Israel Standard is original and is not based on the foreign Standard

Add the following to the Clause:

**Israel Standards**

- SI 33                   - Switches for household and similar fixed electrical installations  
SI 105                 - Connectors for electric appliances and related pins

- SI 145 - Connection boxes for electrical installation: Plastic boxes
- SI 153 Part 2 - Connection boxes for electrical installation: Metal boxes – heavy sheet steel and cast aluminium alloy boxes
- SI 250 - Safety requirements for mains operated electronic and related apparatus for household and similar general use
- SI 544 - Flexible cords for supply of electric portable appliances: Colours of the cores
- SI 900 - Safety of household and similar electrical appliances: General requirements
- SI 1109, all parts - Plugs, socket-outlets and couplers for industrial purposes
- SI 1110 - Appliance couplers for household and similar general purposes
- SI 1419 Part 3 - Low-voltage switchgear and controlgear assemblies: Particular requirements for switchgear and controlgear assemblies intended to be installed in places where unskilled persons have access – Distribution boards

**Israel documents**

- Electricity Law – 1954 with all revisions and regulations
- Consumer Protection Statute (Marking of Goods Order) Kovetz HaTakanot (Official Gazette) 4465 of 24-02-1983 with all revisions

**International Standards**

- IEC 60884-2-3 - Plugs and socket-outlets for household and similar purposes: Particular requirements for switched socket-outlets without interlock for fixed installations
- IEC 61032 - Protection of persons and equipment by enclosures – Probes for verification

**3. Definitions**

The text in the clause applies together with the following definitions:

- 3.201 Special plug and socket-outlet for current up to 16 A**  
Plug and socket-outlet having dimensions that comply with Figures 214 or 215 (the outside dimensions are not obligatory).
- 3.202 Special plug and socket-outlet for special purposes**  
Plug and socket-outlets of construction that comply with Figures 216 or 217.
- 3.203 System**  
Assembly with several accessories, intended for installation in one box and fed from one circuit.
- 3.204 Combination (interlocked) boxes**  
Two or more boxes intended for use in one electric circuit that can be combined together in a manner that the outlet opening of one is compatible with the inlet opening of the other.

**3.205 Assembly**

Several accessories having a common cover.

**3.206 Other installation box**

A box not cylindrical or conical as given in Israel Standards SI 145 and SI 153 Part 2, and intended by the manufacturer for a specific accessory or specific types of accessories (system – see definition 3.203).

**3.207 Two-pin plug**

Plug without an earthing contact.

**3.208 Two-socket-contact socket-outlet**

Socket-outlet without an earthing contact.

**3.209 Three-pin plug**

Plug with two poles and an earthing contact.

**3.210 Three-socket-contact socket-outlet**

Socket-outlet with two poles and an earthing contact

**3.211 Connector**

Plug or socket-outlet complying with Israel Standard SI 1110.

**4. General requirements**

The text in the clause applies together with the following addition:

The accessories shall be suitable for the environmental conditions for which they are intended.

Accessories intended to be exposed to direct sunlight or ultra-violet radiation shall be protected against ultra-violet radiation and contain the marking UV

**6. Ratings**

**6.1 Table 1 – Preferred combinations of types and ratings**

The table applies with the following modifications:

- In the column, "Rated current":

The 10 A current is applicable only for two-pin plugs.

- The following notes shall be added at the table margin:

- See Clause 13 203
- Dimensions and additional requirements for three-phase plugs and socket-outlets for current up to 32 A are given in Part 1 2 of the Standard.

**7. Classification**

**7.3 Plugs classification**

NOTE

The text in the note is not applicable and shall be replaced with the following:



In the State of Israel, equipment of class 0 and equipment of class 01 are not permitted. Reference to these equipment types in all the Clauses of the Standard shall be ignored. See the clause of Definitions in Israel Standard SI 900 for the definitions of equipment of class 0 and equipment of class 01.

## 8. Marking

### 8.1 The text in the clause applies together with the following addition:

Portable multi-outlet socket-outlets shall also be marked with the power for which the accessory is intended (rounded downwards to the nearest hundred).

For portable single outlet or multi-outlet socket-outlets with a cord connected to a socket with an earthing contact, the cord shall have a cross-section of 1.50 mm<sup>2</sup>.

For portable single outlet or multi-outlet socket-outlets with a cord connected to a socket without an earthing contact, the cord shall have a cross-section of 0.75 mm<sup>2</sup>, 1.00 mm<sup>2</sup> or 1.50 mm<sup>2</sup>, according to its function.

The plug current shall comply with the total capacity marked on the accessory

**Note:**

According to the electrical supply rules, the minimum power factor in the State of Israel is 0.92 inductive. This value shall be taken into consideration when determining the maximum capacity for which the accessory is intended.

### 8.2 The text in the Clause applies together with the following modifications and additions:

- At the end of a one-year period from publication of the Standard (see Figures 208, 215 and 216), the following requirements shall take effect:

- A. The phase terminal shall be marked with the letter, L, only and not with the ~ mark. The ~ mark shall be used for marking alternating current only).
- B. The neutral terminal shall be marked, N, only and not by the mark, 0.
- C. The earthing mark may also be marked (but not recommended) without the circumscribing circle.

**Note:**

In the interim period, (until publication of the Standard), the marks ~ and 0, may be used.

At the end of the Clause, the following subclauses shall be added:

- 8.201 On the unique package of the extension cord that includes a single outlet or multi-outlet portable socket-outlet, the cord length between the cord outlet from the plug and the entry to the socket-outlet shall be marked together with the maximum rating for which the product is intended.
- 8.202 An imported product or its unique package shall be marked as required by the Consumer Protection Statute (Marking of Goods Order).
- 8.203 Appliance cords, cords attached to plugs that are not rewirable and extension cords shorter than 100 m long that include molded plugs and socket-outlets at both ends, may be marked in accordance with the International Standards IEC 60245 or IEC 60227 or the

harmonized European Standard, in place of the mark in Hebrew required by Israel Standard SI 473.

## 9. Checking of dimensions

- 9.1 The first paragraph of the Clause is not applicable and shall be replaced by the following:
- Dimensions of accessories shall comply with the figure, according to the accessory type.
  - Gauge dimensions shall comply with the strictest dimensions.
  - Gauge tolerances shall comply with the tolerances given in Table 2.
  - The figures are not intended to dictate a specific design, but rather only the applicable dimensions.

At the end of the Clause, the following subclause shall be added:

- 9.1.201 The dimensions of flush-mounted socket-outlets, intended for installation in a cylindrical or conical mounting box as defined in Israel Standard SI 145, shall comply with the following requirements:
- The cover accessory dimensions shall be at least 80×80 mm. After installation, the cover shall completely cover the box and the accessory. For the purpose of testing, the cover shall be supplied with the accessory.
  - The accessory height shall allow convenient installation in a box whose minimum depth is 39 mm without creating pressure on the wiring.
  - A system shall be supplied together with the accessories, and the outside dimensions shall comply with the dimensions of one accessory

## 10 Protection against electric shock

- 10.1 - After the fifth paragraph (the last on page 39), the following shall be added:  
Check the socket-outlet with the gauge shown in Fig 218. Connect the electric circuit as shown in Fig. 202 and slowly place the gauge into the socket-outlet while swinging it from side to side  
There shall be no contact with live parts of the socket-outlet.
- After the seventh paragraph (the second on page 41), the following shall be added:  
Checking of plugs for prevention of unintentional contact shall be with a socket-outlet having a flat cover of the strictest dimensions.
- 10.3 Add the following to the Clause:  
It shall not be possible to insert only some of the plug pins into the socket-outlet  
Check with the device shown in Fig. 201  
Attempt to insert the device as shown in the figure to each of the socket-outlet socket-contacts  
An electric connection shall not be created.

On multi-outlet socket-outlets and on adaptors, it shall not be possible to insert a plug simultaneously to two socket-outlets.

Check by means of an attempt to insert a two-pin plug with a force of 150 N between each two socket-outlets.

The plug shall not be inserted.

While inserting the gauge, in compliance with Fig. 218, to the socket-outlet, no unintentional contact shall be created.

Check with a test finger as shown in Fig. 2 in the International Standard IEC 61032.

No contact shall be made.

At the end of the Clause, the following subclauses shall be added:

- 10.201 On assemblies with a common cover that allow the use of various circuits or various voltages, there shall not be access to live parts after removal of the common cover. Compliance shall be checked by means of the tests given in Clauses 10.1 and 10.3.
- 10.202 Unintentional contact shall be prevented during insertion of a special plug for currents up to 16 A into a socket-outlet, by one of the following two methods:
  - A. The minimum dimensions of the plug base shall be as shown in Fig. 214A.
  - B. The pins (phase and neutral) shall be protected by 0.3 mm wall thickness sleeves of insulating material as shown in Fig. 214B

**Note:**

In order to prevent small children from inserting a finger into a socket-outlet, it is recommended that a socket-outlet with openings to the socket-contacts where the opening diameters exceed 6 mm, be protected by internal protective shutters or other protective device

## **11. Provision for earthing**

11 1 The Clause applies with the following addition:

Check with the device shown in Fig 202.

11 2 NOTE 3

The text in the note applies with the following addition:

If the socket-outlet has parts made of aluminium or an aluminium alloy, there shall not be direct contact between the aluminium or aluminium alloy and the copper earthing terminal. Washers shall not be used that can be turned over during installation.

## **13. Construction of fixed socket-outlets**

13.7 The text in the Clause applies with the following addition.

13.7.201 Incorrect assembly of a socket-outlet cover shall not be possible.

After assembly of a socket-outlet cover, it shall not be possible to insert a plug with an earthing pin in a manner that there is no contact between the plug earthing pin and the earthing socket-contact of the socket-outlet.

At the end of the Clause, the following subclauses shall be added:

- 13.201 A socket-outlet with mounting legs, intended for installation in a conical mounting box, as defined in Israel Standard SI 145, shall have a maximum opening between the mounting legs, when they are closed, of 54 mm.
- 13.202 There is no obligation to install partitions between singular socket-outlets of multiple socket-outlets, intended for surface mounting or flush mounting for connection to one electrical circuit, wired in advance in this manner by the manufacturer.  
The connection between the socket-outlets shall be fixed, durable and detachable only with tools.
- 13.203 A two socket-contact socket-outlets for fixed mounting is only permitted as part of a multiple socket-outlet, from an assembly or system that contains at least one three socket-contact socket-outlet (see definitions).
- 13.204 Multiple socket-outlets shall be designed so that the insertion of one angle plug shall not interfere with the insertion of another angle plug. Check by insertion of a angle plug connected to a 1.5 mm<sup>2</sup> cross-section cord.  
There shall be no collision (interference) between the enclosure of one plug to another cord.

#### 14. Construction of plugs and portable socket-outlets

- 14 21 The text in the Clause applies with the following modification:  
The first paragraph does not apply and shall be replaced by the following:  
Plugs for class II equipment intended for current not exceeding 2.5 A shall not be rewirable.  
At the end of the Clause, the following subclauses shall be added:
- 14 201 Multiple socket-outlets may contain two socket-contact socket-outlets that are suitable for plugs as shown in Fig. 213.  
These socket-outlets shall not allow the insertion of a plug with an earthing pin.  
Check using plugs of other types
- 14.202 Incorrect assembly of a socket-outlet cover shall not be possible.  
After assembly of the socket-outlet cover, the insertion of a plug with an earthing pin shall not be possible in a manner that there is no contact between the earthing pin of the plug and the earthing socket-contact of the socket-outlet.
- 14.203 Single outlet socket-outlets and multiple socket-outlets shall not allow the connection of more than one circuit or more than one voltage  
Multiple socket-outlets shall be prewired between the socket-outlets.
- 14 204 Multiple socket-outlets shall be designed so that the insertion of one angle plug does not interfere with the insertion of another angle plug  
Check by insertion of a angle plug connected to a 1.5 mm<sup>2</sup> cross-section cord.  
There shall be no collision (interference) between the enclosure of one plug to another cord.

**22. Force necessary to withdraw the plug**

**22.1 Verification of the maximum withdrawal force**

The Clause applies with the following addition:

The test shall be performed with a 4.5 mm diameter pin.

**22.2 The Clause applies with the following addition:**

The test shall be performed with a 3.94 mm diameter pin.

**23. Flexible cables and their connection**

**23.1 The text in the Clause applies with the following addition:**

It is recommended that the conductors in cords of non-rewirable plugs shall be connected to pins by means of crimping. If the conductors are connected by welding or crimping, the test specified in Annex A shall be conducted during manufacturing.

**23.2 Table 17 – External dimensions of flexible cables to be accommodated by cord anchorages**

The text in the table applies with the following modifications:

In place of the cords defined in the table, cords shall be used that comply with Israel Standard SI 473, as follows:

- In place of 60227 IEC 42 – the cord, designated "טפ" in accordance with Israel Standard SI 473.6;
- In place of 60227 IEC 53 – the cord, designated "טפפ" in accordance with Israel Standard SI 473.8;
- In place of 60227 IEC 66 – the cord, designated "פג" in accordance with Israel Standard SI 473.10.

**23.3 The text in the Clause applies with the following addition:**

The identifying colours of the insulated conductors in the cords shall comply with Israel Standard SI 544.

**Figure 30 – Example of test arrangement to verify the fixation of pins in the body of the plug**

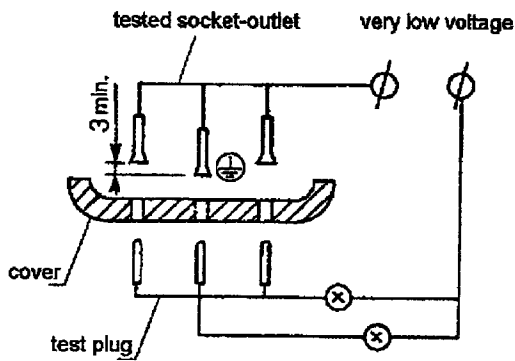
The Figure applies with the following modifications:

The dimensions in the Figure shall be as follows:

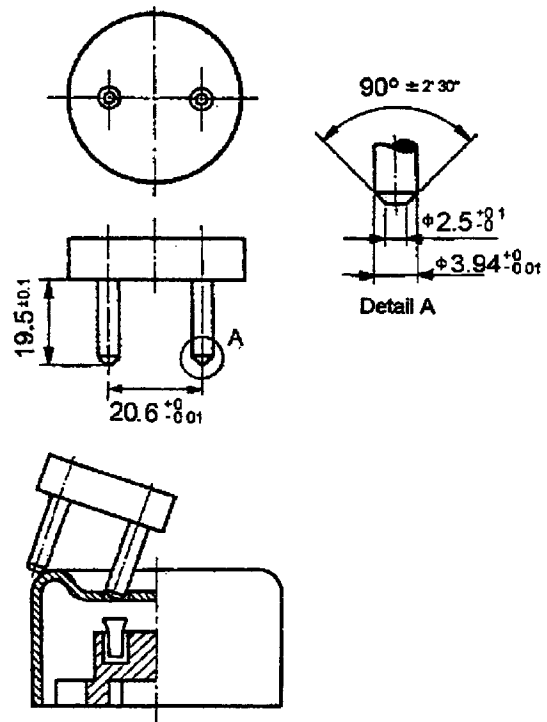
$$d_1 = 19$$

$$d_2 = 13.44$$

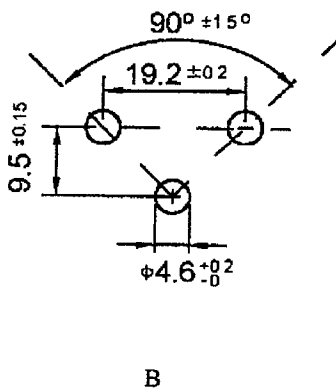
After Figure 42, the following Figures shall be added:



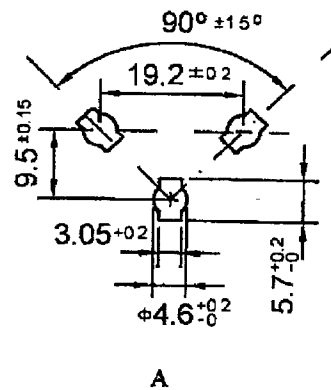
**Fig. 202 - Apparatus for testing premature contact of the earthing connection**



**Fig. 201 - Gauge for testing the possibility of incorrect insertion of plug to the socket-outlet**



B



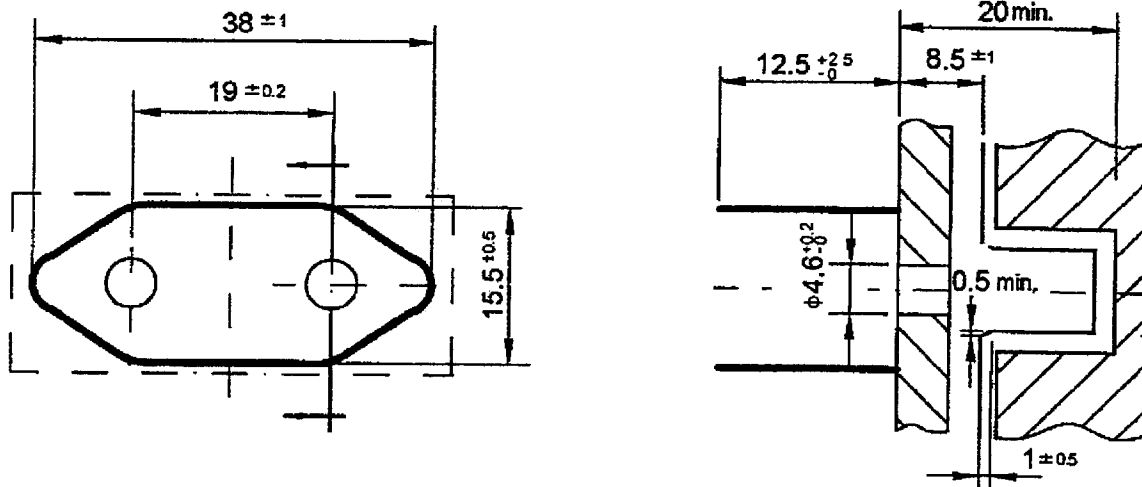
A

**Note:**

Fig A allows the use of a plug with flat pins and a plug with round pins of 4 mm nominal diameter

Fig B is intended only for use with a plug with round pins

**Fig. 203 - Hole dimensions for insertion of pins in a socket-outlet cover with an earthing contact**



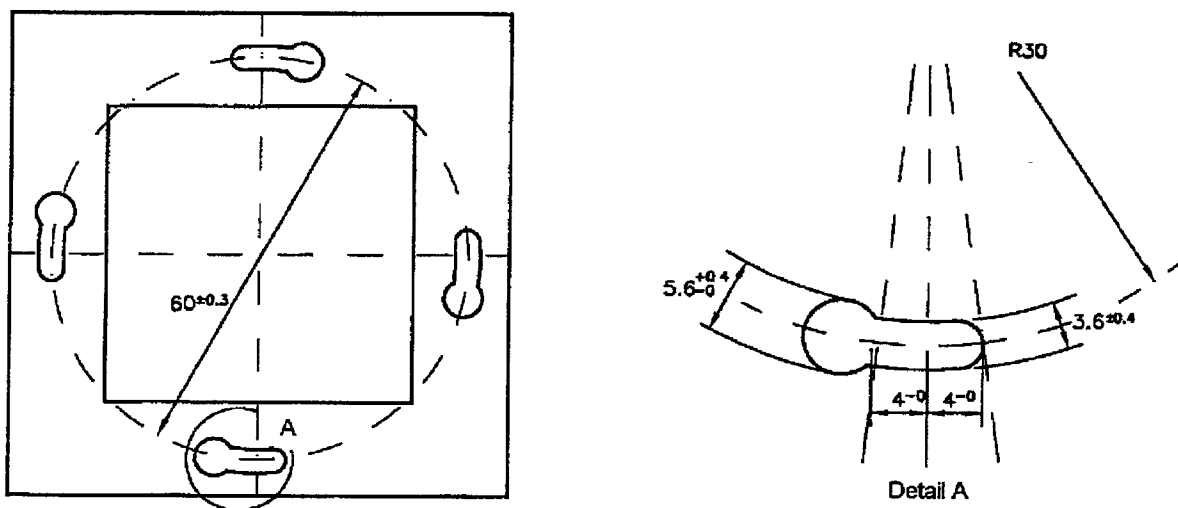
**Note:**

A "barrier", above 5.5 mm and less than 17 mm high, shall be around the socket-outlet, or the socket-outlet shall be recessed, respectively.

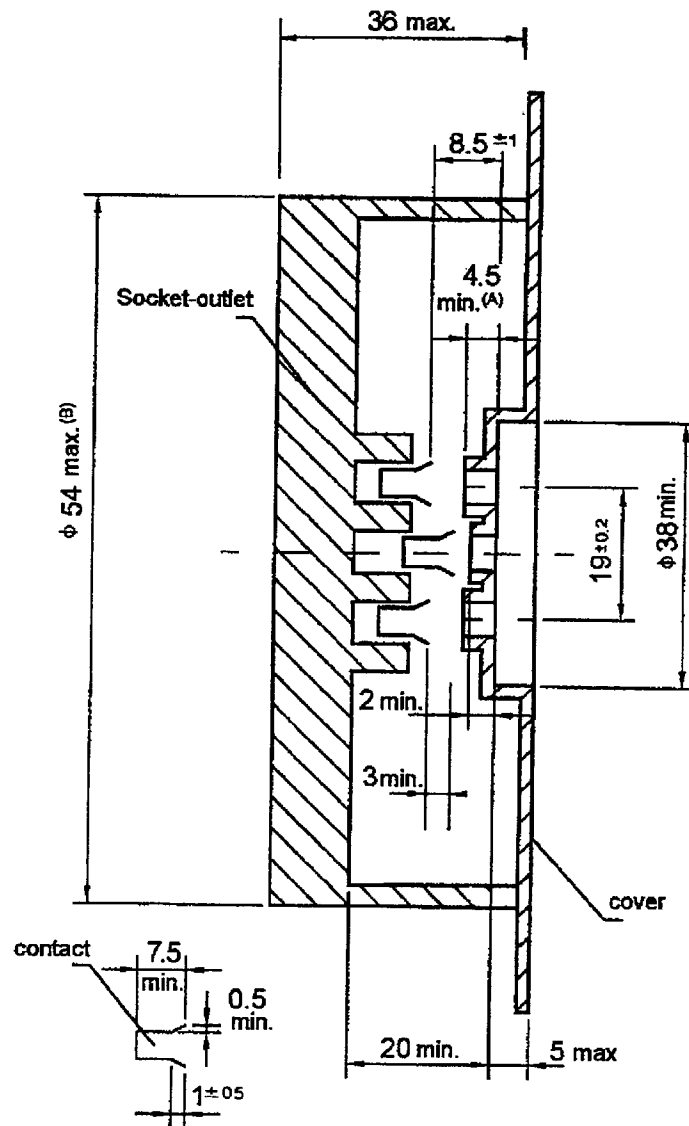
**Fig. 204 – Dimensions of two-pin portable socket-outlet and adaptor**



**Fig. 205 – Marking of socket-outlet terminals (front view without cover)**



**Fig. 206 - Socket-outlet frame**

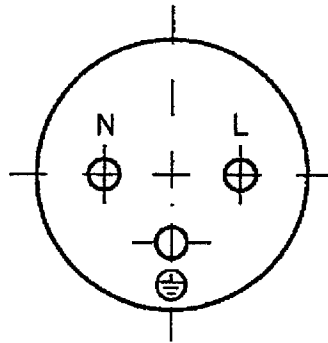


**Notes:**

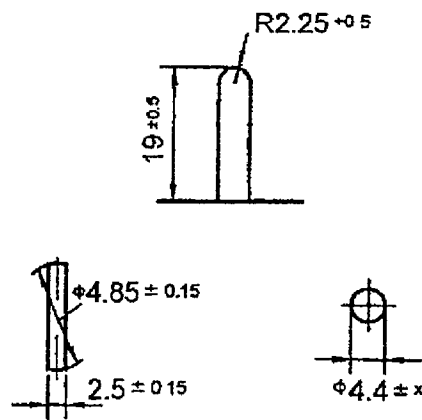
- A The requirement of 4.5 mm does not apply to socket-outlets with protective shutters. The leader may be part of the socket-outlet base.
- B The 54 dimension applies only to socket-outlets intended for mounting in "Box 55" that complies with Figs 1 and 2 in SI 145 of June 1994

**Fig. 207 – Three-pin socket-outlet dimensions**





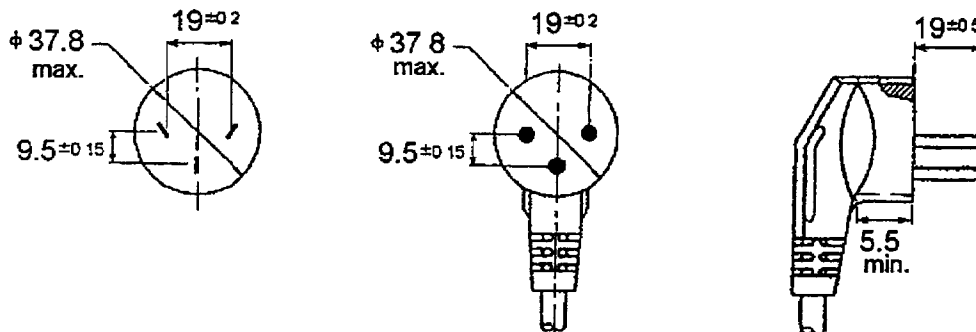
**Fig. 208 – Pin marking on plug (view from inside)**



**Notes:**

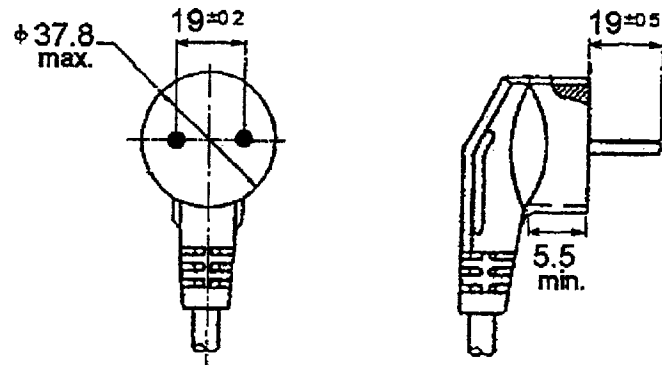
- For non-rewirable plug:  $x = 0.06$
- For rewirable plug:  $x = 0.1$
- At the end of the transition period, flat pin plugs will not be approved, excluding for special purpose plugs as shown in Fig. 216

**Fig. 209 – Pin dimensions for plug up to 16 A**



Note: The plug can be an angle plug or straight plug

**Fig. 210 - Pin dimensions for a 16 A current plug**



Note:

The plug can be an angle plug or straight plug

Fig. 211 – Dimensions of a round two-pin 16 A current plug

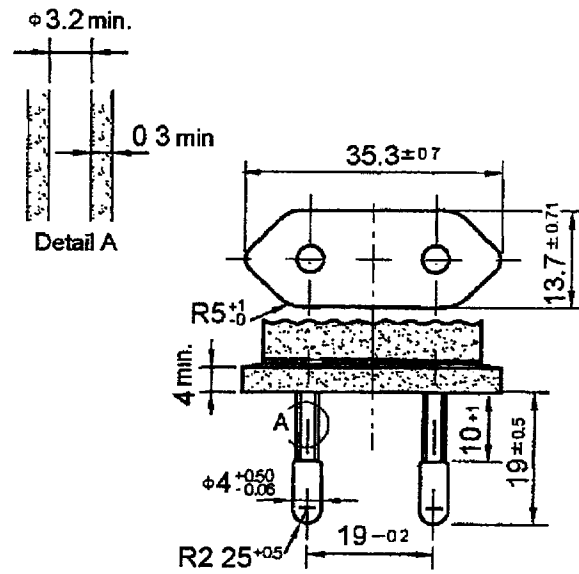
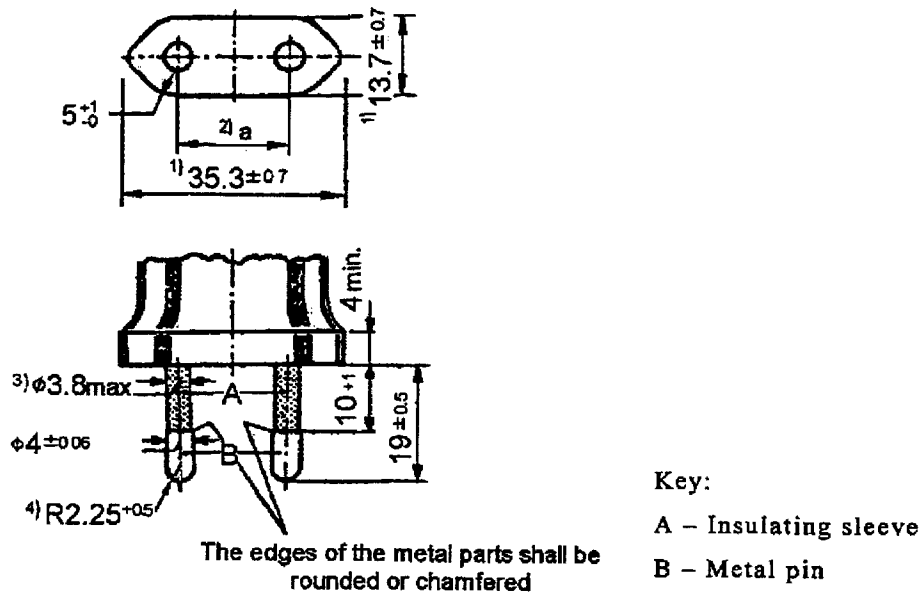


Fig. 212 – Dimensions of a non-rewirable flat two-pin plug for current up to 10 A

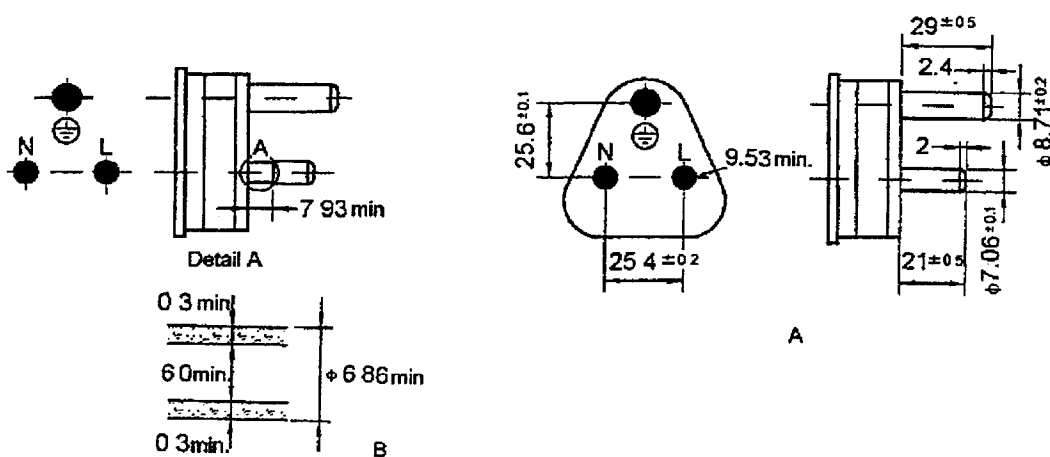


**Notes:**

- 1) These dimensions shall not be exceeded in the range of up to 18 mm from the plug base
- 2) The dimension, a, shall be between 18 mm to 19.2 mm at the plug base and between 17 mm to 18 mm at the pin edges
- 3) This dimension may be increased up to 4 mm up to a distance of 4 mm from the plug base
- 4) The pin edges shall be round or spherical, as shown in the drawing

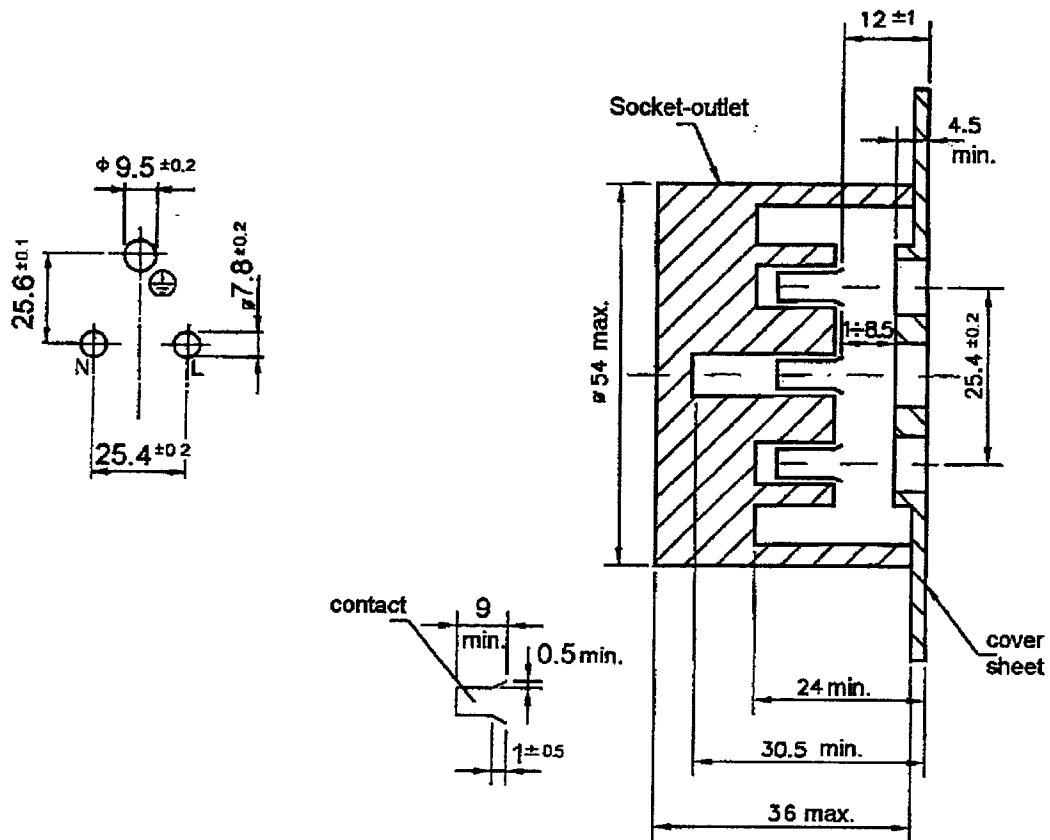
General note: The drawings are applicable only in relation to the given dimensions

**Fig. 213 – Dimensions of a non-rewirable flat two-pin plug for current up to 2.5 A**



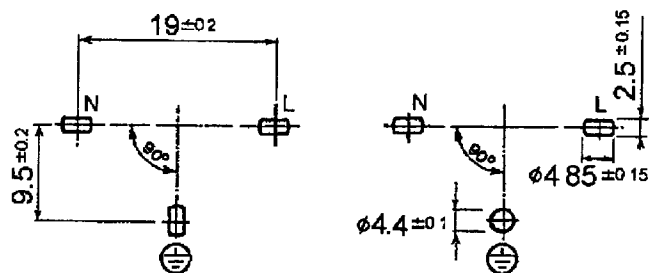
Note: The dimension 9.53 min does not apply to a plug with insulation sleeves

**Fig. 214 – Special plug for current up to 16 A (rear view)**



Note: The 54 dimension applies only to socket-outlets intended for mounting in "Box 55"

Fig. 215 – Special socket-outlet for current up to 16 A (front view without cover)



Note: The plug may be an angle plug or a straight plug

Fig. 216 – Pins in special-purpose plugs

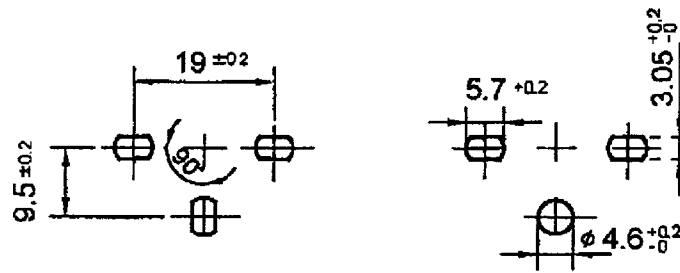


Fig. 217 – Dimensions of holes in special purpose socket-outlet cover

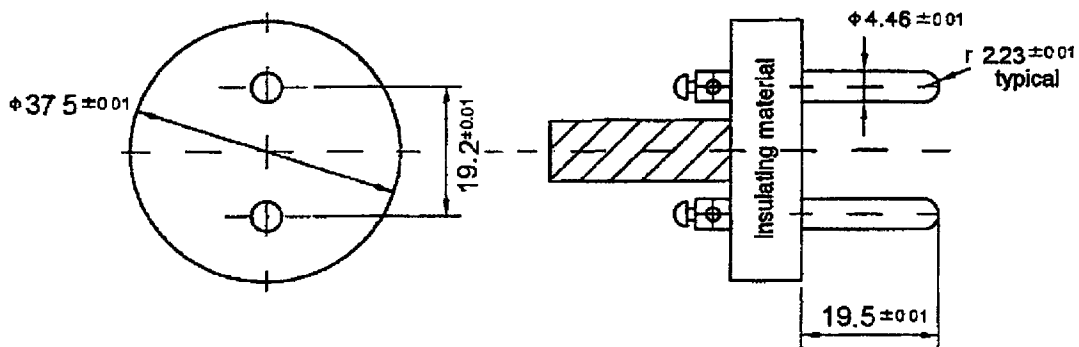


Fig. 218 – Gauge for checking unintentional contact in a socket-outlet

### BIBLIOGRAPHY

The following Israel Standards and documents are applicable in place of some of the International Standards specified in the bibliography, as follows:

The referenced International Standard	The substituted Israel Standard
IEC 60083 – 1975	This Standard (SI 32 Part 1.1)
IEC 60320 – 1981	SI 1110 – Appliance couplers for household and similar general purposes
IEC 60364-4-41 – 2001	Israel Electricity Statute – 1945, its revisions and regulations
IEC 60670 – 1989	SI 145 – Connection boxes for electrical installation – Plastics boxes

At the end of the Standard, Annex A shall be added as follows:

## **ANNEX A – WELD QUALITY TEST OF FLEXIBLE CONDUCTORS**

(informative)

This test shall be performed on pin samples of a non-interchangeable plug (moulded plug), during the manufacture of a plug with flexible conductors connected to the pin by welding. This test is intended to reveal changes in materials or in the manufacturing process that may reduce the safety of the plug.

This test shall be performed after welding the flexible conductors and prior to the plug moulding. This test shall be performed separately for each of the pins.

All the pins on 3 plugs shall be tested at the beginning of each manufacturing shift or after any adjustment or repair of the welding apparatus. Repeat the test every 500 plugs.

Perform the test with the apparatus shown in Fig. 20 or a similar apparatus.

Clamp the pin to the apparatus and gradually apply an increasing tensile force on the conductor up to a value of 170 N/mm<sup>2</sup> of conductor cross-section.

The force shall be applied continuously for 60 seconds.

After the test, no torn or disconnected wires shall be observed near the weld area