Specification for 2-pin reversible plugs and shaver socket-outlets

ICS 29.120.30



Co-operating organizations

The Electrical Industry Standards Committee, under whose supervision this British Standard was prepared, consists of representatives from the following Government departments and scientific and industrial organizations:

Associated Offices' Technical Committee

Association of Consulting Engineers

Association of Mining Electrical and Mechanical Engineers

Association of Supervising Electrical Engineers

British Electrical and Allied Manufacturers' Association

British Plastics Federation

British Radio Equipment Manufacturers' Association

British Railways Board

Conduit Fittings Manufacturer's Association

Confederation of British Industry

Crown Agents for Oversea Governments and Administrations

Department of Employment and Productivity

Electric Cable Makers' Confederation

Electric Lamp Industry Council

Electric Light Fittings Association

Electrical Association for Women

Electrical Contractors' Association (Incorporated)

Electrical Contractors' Association of Scotland

Electrical Research Association

Electricity Council, the Central Electricity Generating Board and the Area

Boards in England and Wales

Electronic Engineering Association

Engineering Equipment Users' Association

Fire Offices Committee

Home Office

Institution of Electrical Engineers

Ministry of Defence

Ministry of Defence, Army Department

Ministry of Defence, Navy Department

Ministry of Power

Ministry of Public Building and Works

Ministry of Technology

Municipal Passenger Transport Association (Incorporated)

National Inspection Council for Electrical Installation Contracting

National Physical Laboratory (Ministry of Technology)

Oil Companies Materials Association

Post Office

Public Transport Association (Incorporated)

South of Scotland Electricity Board

Women's Advisory Committee of the BSI

This British Standard, having been approved by the Electrical Industry Standards Committee, was published under authority of the Standards Board and comes into effect on 19 March 1970

© The British Standards Institution 2016 Published by BSI Standards Limited 2016

The following BSI references relate to work on this standard: Committee reference ELE/4/2 Drafts for comment 66/8189 DC, 16/30341956 DC

ISBN 978 0 580 94334 8

Amendments/corrigenda issued since publication

Amd. No.	Date	Comments
4392	October 1983	
5897	April 1988	
9156	November 1996	
15175	11 August 2004	
A5	August 2016	See Foreword

Contents

		Page
Co-operating organizations		Inside front cover
Fore	word	iii
Secti	on 1. General	
1.1	Scope	1
Secti	on 2. Requirements for plugs	
2.1	Interchangeability	3
2.2	Precautions against accidental contact	3
2.3	Contour of plug	3
2.4	Dimensions and spacing of plug pins	3
2.5	Clearance and creepage	3
2.6	Materials	4
2.7	Plug cover and plug base	4
2.8	Plug pins and terminals	4
2.9	Method of entry of flexible cord in the plug	4
2.10	Plug finger grip	4
2.11	Separation of terminals and conductors	4
2.12	Marking	5
Secti	on 3. Tests	
3.1	General test requirements	7
3.2	Type tests	7
3.3	Insulation resistance	7
3.4	High voltage flash test	7
3.5	Conductor clamping in non-rewirable plugs	7
3.6	Cord grip of rewirable plugs	8
3.7	Resistance of pins to twisting in non-rewirable plugs	8
3.8	Resistance of pins to pull-out in non-rewirable plugs	8
3.9	Gauge (see Figure 1)	8
Secti	on 4. Requirements for shaver socket-outlets	
4.1	Interchangeability	9
4.2	Precautions against accidental contact	9
4.3	Contact between plug and shaver socket-outlet	9
4.4	Dimensions and spacings of socket-contacts	9
4.5	Clearance and creepage	11
4.6	Materials	11
4.7	Construction of shaver socket-outlets	12
4.8	Marking	14
Secti	on 5. Tests	
5.1	General test requirements	15
5.2	Type tests	15
5.3	Insulation resistance	15
5.4	High voltage flash test	15
5.5	Effectiveness of contact	15
5.6	Withdrawal pull of complete plugs	16
5.7	Endurance tests	16

	Page
Section 6. Gauges for shaver socket-outlets	
6.1 "Go" gauges (see Figure 2 and Figure 3)	17
6.2 "Contact" and "no-contact" gauges (see Figure 4 and Figure 5)	17
6.3 "Withdrawal pull" gauge (see Figure 7)	17
Figure 1 — "Go" gauge for plug	5
Figure 2 — Maximum "Go" gauge for socket-outlet	9
Figure 3 — Minimum "Go" gauge for socket-outlet	10
Figure 4 — "Non-contact" test gauge	10
Figure 5 — "Contact" test gauge	11
Figure 6 — Test apparatus and circuit for use with "contact" and	
"no-contact" test gauges for 2-pin reversible plug and socket-outlet	13
Figure 6a — Electric shaver outlet symbol	14
Figure 7 — "Withdrawal pull" gauge	16
List of references	19

Foreword

This British Standard is published by BSI Standards Limited, under licence from The British Standards Institution.

This British Standard has been prepared by Technical Committee PEL/23 (formerly ELE/4/2).

BS 4573:1970+A5:2016 supersedes BS 4573:1970 (incorporating Amendment No. 4:2004), which is withdrawn.

Text introduced or altered by Amendment No. 5 is indicated in the text by tags (As). Minor editorial changes are not tagged. Previous amendments are not indicated.

This publication does not purport to include all the necessary provisions of a contract. Users are responsible for its correct application.

Compliance with a British Standard cannot confer immunity from legal obligations.

Summary of pages

This document comprises a front cover, an inside front cover, pages i to iv, pages 1 to 19 and a back cover.

The BSI copyright notice displayed in this document indicates when the document was last issued.

iv blank

Section 1. General

1.1 Scope

This British Standard specifies requirements for reversible 2-pin plugs and shaver socket-outlets with ratings not greater than 250 V and 200 mA. a.c. (45)

The plugs may be rewirable or integrally moulded and may have the cable entry in any convenient face.

The shaver socket-outlets have a restricted rating of 200~mA for use on voltages of 200~V to 250~V a.c. only and are shuttered, and are for use in rooms other than bathrooms.

These socket-outlets are not necessarily suitable for the supply to electric dry shavers containing battery charging units.

NOTE The titles of the publications referred to in this standard are listed on the inside back cover.