

Specification for

Polyolefin copper-conductor telecommunication cables

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Committees responsible for this British Standard

The preparation of this British Standard was entrusted by the Electronic Components Standards Policy Committee (ECL/-) to Technical Committee ECL/6 upon which the following bodies were represented:

- British Cable Makers' Confederation
- British Plastics Federation
- Crown Agents for Oversea Governments and Administrations
- Home Telephone Cable Makers' Association (1960)
- Society of British Aerospace Companies Ltd.
- Telecommunication Engineering and Manufacturing Association

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Foreword

This revision of BS 3573 has been prepared under the authority of the Electronic Components Standards Policy Committee and supersedes BS 3573:1972 which is withdrawn. It takes into account IEC Publication 708 and is intended for use where practices based upon those developed over many years in the United Kingdom by administrations, private agencies and cable manufacturers are to be used.

The principal changes take advantage of modern developments and include the option of unit twin construction and the relevant colour scheme. A self-supporting aerial cable with built in suspension wire or strand is included and in view of the continuing requirement for unfilled cable for terminations and similar purposes, an unfilled version of the cables is once again specified. However the use of an unfilled cellular insulated cable is only recommended where the user foresees specific benefits in his application.

As in the previous edition, reference is made to BS 6234 for details of polyethylene for the insulation or sheath. Alternative polyolefin materials may be used provided they comply with British Standard.

In view of frequent enquiries received from cable users for circuit planning information, nominal attenuation data is given in Appendix E for guidance only.

Assessed capability. It is the responsibility of the manufacturer to establish quality control procedures to ensure that the quality of manufacture including the materials used will comply with this British Standard. It is not intended that a complete testing programme is carried out on every cable length.

Users of this British Standard are advised to consider the desirability of assessment and registration of a supplier's quality systems against the appropriate Part of BS 5750 by a third party certification body.

A British Standard does not purport to include all the necessary provisions of a contract. Users of British Standards are responsible for their correct application.

Compliance with a British Standard does not of itself 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 16, an inside back cover and a back cover.

This standard has been updated (see copyright date) and may have had amendments incorporated. This will be indicated in the amendment table on the inside front cover.

Section 1. General

1 Scope

This British Standard specifies requirements, for the dimensions, construction and methods of test for fully filled, polyolefin sheathed telecommunication cables with polyolefin-insulated copper conductors.

The cables are suitable for connecting subscribers into the exchange cable network.

A range of cables is specified from two to 100 pairs of conduits, covering five sizes of conductors having cellular, foamskin or solid polyolefin insulation.

Provision has been made for an alternative unfilled version and various additional features including aluminium tape screening and steel wire armouring.

The cables are suitable for drawing into ducts, or under favourable circumstances for laying direct in the ground. Galvanized wire armouring is specified for severe environmental conditions of direct burial. The cables are also suitable for erection as aerial cables either when supported by a suspension wire, or by using the integrally sheathed construction.

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

2 Definitions

For the purposes of this British Standard, the definitions relating to electric cables in BS 4727 and plastics in BS 1755 apply.

Section 2. Product designations

3 Products

Cables complying with this standard supplied without designation shall be as follows:

- cellular polyethylene insulated;
- 10-pair unit construction;
- petroleum jelly filled;
- black polyethylene sheathed.

Products incorporating variants, i.e. alternatives and/or additional requirements, shall be identified using the following code:

Designation Variant

S	Solid polyethylene insulation
F	Foamskin polyethylene insulation
B	Solid polypropylene insulation
C	Concentric layer stranded
D	Non-petroleum jelly filled
T	Aluminium tape screened
W	Steel wire armoured
P	Polyethylene sheath over armour
U	Increased thickness of outer sheath
V	Polyvinyl chloride (PVC) sheath over armour
A	Figure of eight aerial

Examples

- a) 10pr/0.5 mm;
10-pair/0.5 cellular polyethylene insulated, unit construction, petroleum jelly filled, black polyethylene sheath.
- b) 10pr/0.5 mm SCTWP;
10-pair/0.5 mm solid polyethylene insulated, concentric layer stranded, petroleum jelly filled, aluminium tape screened, polyethylene sheathed, steel wire armoured, polyethylene oversheathed.
- c) 50pr/0.5 mm SDTA;
50-pair/0.5 mm solid polyethylene insulated, unit construction, unfilled, aluminium tape screened aerial self-supporting cable.