

Flexible insulating sleeving for electrical purposes —

**Part 3: Specification for requirements
for individual types of sleeving —**

**Sections 100 to 105: Extruded PVC
sleeving —**

(Implements HD 523.3.100/105 S1:1990)

Committees responsible for this British Standard

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- Adhesive Tape Manufacturers' Association
- British Rubber Manufacturers' Association Ltd.
- Ministry of Defence

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Contents

	Page
Committees responsible	Inside front cover
National foreword	ii
Introduction	1
1 Scope	1
2 Designation	1
3 General requirements	1
4 Dimensions	1
5 Breakdown voltage	1
Appendix A Method of test for the migration of plasticiser	10
Table I — Property requirements	2
Table II — Special requirements	3
Table IIIa — Requirements for breakdown voltage and dimensions — Sheet 100: High temperature grade, unilateral tolerances	4
Table IIIb — Requirements for breakdown voltage and dimensions — Sheet 101: High temperature grade, bilateral tolerances	5
Table IIIc — Requirements for breakdown voltage and dimensions — Sheet 102: Low temperature grade, bilateral tolerances	6
Table IIId — Requirements for breakdown voltage and dimensions — Sheet 103: General purpose grade, unilateral positive tolerances	7
Table IIIe — Requirements for breakdown voltage and dimensions — Sheet 104: High temperature grade, unilateral positive tolerances	8
Table IIIf — Requirements for breakdown voltage and dimensions — Sheet 105: Low temperature grade, unilateral positive tolerances	9
Table IV — Mandrel diameters for low temperature bend test	9
List of references	Inside back cover

National foreword

This Section of BS 6893 has been prepared by Technical Committee GEL/15. It is identical with IEC 684-3.100 to 3.105:1988 *Specification for flexible insulating sleeving — Part 3: Specification requirements for individual types of sleeving — Sheets 100 to 105: Extruded PVC sleeving*, published by the International Electrotechnical Commission (IEC) and endorsed by the European Committee for Electrotechnical Standardization (CENELEC) as HD 523.3.100/105 S1.

Cross-references

Publications referred to	Corresponding British Standard
	BS 6893 <i>Flexible insulating sleeving for electrical purposes</i>
IEC 684-1	Part 1:1987 <i>Specification for general requirements</i> (Identical)
IEC 684-2	Part 2:1987 <i>Methods of test</i> (Identical)
IEC 757:1983	BS 7645:1993 <i>Code for designation of colours</i> (Identical)

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Summary of pages

This document comprises a front cover, an inside front cover, pages i and ii, pages 1 to 10, 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.

Introduction

This standard is one of a series which deals with flexible insulating sleeving for electrical purposes. The series consists of three parts:

- *Part 1: Definitions and General Requirements (IEC Publication 684-1);*
- *Part 2: Methods of Test (IEC Publication 684-2);*
- *Part 3: Specification Requirements for Individual Types of Sleeving (IEC Publication 684-3).*

This standard gives six of the sheets comprising Part 3 as follows:

- Sheet 100: Extruded PVC sleeving — General purpose grade;
- Sheet 101: Extruded PVC sleeving — High temperature grade;
- Sheet 102: Extruded PVC sleeving — Low temperature grade;
- Sheet 103: Extruded PVC sleeving — General purpose grade — Unilateral tolerances;
- Sheet 104: Extruded PVC sleeving — High temperature grade — Unilateral tolerances;
- Sheet 105: Extruded PVC sleeving — Low temperature grade — Unilateral tolerances.

1 Scope

This standard gives requirements for non-heat-shrinkable sleeving of circular cross-section, extruded from PVC.

Sheets 100 and 103 cover sleeving having a temperature index of 90, Sheets 101 and 104 cover sleeving having a temperature index of 105, and Sheets 102 and 105 cover sleeving formulated to be flexible at -65°C .

Sheets 100, 101 and 102 employ bilateral tolerances for the bore diameter; Sheets 103, 104 and 105 employ unilateral positive tolerances. The bilateral tolerances given in Sheets 100, 101 and 102 are preferred but the unilateral tolerances in Sheets 103, 104 and 105 may continue as an interim measure.

Each sheet covers three levels of wall thickness: “thin wall”, “standard wall”, and “thick wall”, related to nominal bore diameter and with corresponding differences in requirements for breakdown voltage.

The sleeving is normally available in bore sizes 0.3 mm to 50 mm and in the following opaque colours:

black, blue, brown, grey, green, orange, pink, red, turquoise, violet, white, yellow and green/yellow.

It is also available in transparent form.

2 Designation

The sleeving shall be identified by one of the following means:

- a) in words and numbers;
- b) by the designation which follows;
- c) by both the above.

IEC 684-3-100 (or 101 to 105) — nominal bore size in millimetres — wall thickness level — colour.

Where a numerical code is required for the wall thickness level the mid point of the range of permitted wall thickness may be used.

The addition of “x” at the end of the identification indicates that one or more of the special requirements in Table II have been agreed and included in the purchase contract.

e.g. IEC 684-3-100-0.8-standard-white-x, or

IEC 684-3-100-0.8-0.4-white-x

Any abbreviation used for colour shall comply with IEC Publication 757.

3 General requirements

3.1 Basic requirements

Sleeving shall comply with the requirements of both

- a) IEC Publication 684-1 and
- b) Table I of this standard and that part of Table III appropriate to the grade.

3.2 Special requirements

Where any of the properties listed in Table II are specified the appropriate test procedure shall be employed and the value shall comply with the requirement in the table.

4 Dimensions

When tested by the methods described in Sub-clauses 3.1 and 3.2 of IEC Publication 684-2 the sleeving shall comply with the requirements for tolerance on nominal bore diameter and with the requirements for wall thickness given in Table IIIa to Table IIIf.

5 Breakdown voltage

Breakdown voltage shall be determined at room temperature and at elevated temperature as appropriate to the grade, using one of the methods given in Clauses 21.2, 21.3 and 21.4 of IEC Publication 684-2.