

SLOVENSKI STANDARD
SIST HD 523.3.403 to 405 S1:1998
01-junij-1998

Specification for flexible insulating sleeving - Part 3: Specification requirements for individual types of sleeving - Sheets 403 to 405: Glass textile sleeving with acrylic based coating (IEC 60684-3-403:1988)

Specification for flexible insulating sleeving -- Part 3: Specification requirements for individual types of sleeving -- Sheets 403 to 405: Glass textile sleeving with acrylic based coating

Bestimmung für Isolierschläuche -- Teil 3: Bestimmungen für einzelne Schlauchtypen -- Blätter 403 bis 405: Glasfilament-Textilschläuche mit Acrylbeschichtung

Spécification pour gaines isolantes souples -- Partie 3: Spécifications particulières aux types particuliers de gaines -- Feuilles 403 à 405: Gainés en fibre de verre tissées, avec revêtement acrylique

Ta slovenski standard je istoveten z: HD 523.3.403 to 405 S1:1990

ICS:

29.035.30	S^ æ ā} ā} Á c\ ^} ā ã [æã\ ã æ ^ãã	Ceramic and glass insulating materials
-----------	---	--

SIST HD 523.3.403 to 405 S1:1998 en

iTeh STANDARD PREVIEW
(standards.iteh.ai)

SIST HD 523.3.403 to 405 S1:1998

<https://standards.iteh.ai/catalog/standards/sist/234b5c41-e43b-4d2d-a19c-4649602af33b/sist-hd-523-3-403-to-405-s1-1998>

UDC: 621.315.612-494:621.315.616

KEY WORDS: Electronic component, protection sleeving, flexible material,
glass textile and acrylic based coating

SPECIFICATION FOR FLEXIBLE INSULATING SLEEVING
PART 3: SPECIFICATION REQUIREMENTS FOR INDIVIDUAL
TYPES OF SLEEVING
SHEETS 403 TO 405: GLASS TEXTILE SLEEVING WITH
ACRYLIC BASED COATING

Spécification pour gaines
isolantes souples
Troisième partie: Spécifications
particulières aux types
particuliers de gaines
Feuilles 403 à 405: Gains en
fibre de verre tissées, avec
revêtement acrylique

Bestimmung für flexible
Isolierschläuche
Teil 3: Technische
Lieferbedingungen für einzelne
Schlauchtypen
Blätter 403 bis 405:
Glasfilament-Textil-Schläuche
mit Acrylbeschichtung

iTeh STANDARD PREVIEW
(standards.iteh.ai)

BODY OF THE HD

The Harmonization Document consists of:

- IEC 684-3-403 to 405 (1988) ed 1: IEC/SC 15C, not appended

This Harmonization Document was approved by CENELEC on 1989-12-05.

The English and French versions of this Harmonization Document are provided by the text of the IEC publication and the German version is the official translation of the IEC text.

According to the CENELEC Internal Regulations the CENELEC member National Committees are bound:

to announce the existence of this Harmonization Document at national level
by or before 1990-03-01

to publish their new harmonized national standard
by or before 1990-09-01

to withdraw all conflicting national standards
by or before 1990-09-01.

Harmonized national standards are listed on the HD information sheet,
which is available from the CENELEC National Committees or from the CENELEC Central
Secretariat.

The CENELEC National Committees are the national electrotechnical committees
of Austria, Belgium, Denmark, Finland, France, Germany, Greece, Iceland, Ireland,
Italy, Luxemburg, Netherlands, Norway, Portugal, Spain, Sweden, Switzerland and
United Kingdom.

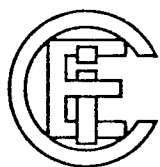
iTeh STANDARD PREVIEW
(standards.iteh.ai)

SIST HD 523.3.403 to 405 S1:1998

<https://standards.iteh.ai/catalog/standards/sist/234b5c41-e43b-4d2d-a19c-4649602af33b/sist-hd-523-3-403-to-405-s1-1998>

NORME INTERNATIONALE INTERNATIONAL STANDARD

4
CEI
IEC
684-3-40
à/t
40



Commission Electrotechnique Internationale
International Electrotechnical Commission
Международная Электротехническая Комиссия

Première édition
First edition
1988

Spécification pour gaines isolantes souples

Troisième partie: Spécifications particulières aux types particuliers de gaines
Feuilles 403 à 405: Gains en fibre de verre tissées, avec revêtement acrylique

iTeh STANDARD PREVIEW
(standards.iteh.ai)

SIST HD 523.3.403 to 405 S1:1998
<https://standards.iteh.ai/catalog/standards/sist/234b5c41-e43b-4d2d-a19c-4649602af33b/sist-hd-523-3-403-to-405-s1-1998>

Specification for flexible insulating sleeving

Part 3: Specification requirements for individual types of sleeving
Sheets 403 to 405: Glass textile sleeving with acrylic based coating

© CEI 1988 Droits de reproduction réservés — Copyright — all rights reserved

Aucune partie de cette publication ne peut être reproduite ni utilisée sous quelque forme que ce soit et par aucun procédé, électronique ou mécanique, y compris la photocopie et les microfilms, sans l'accord écrit de l'éditeur.

No part of this publication may be reproduced or utilized in any form or by any means, electronic or mechanical, including photocopying and microfilm, without permission in writing from the publisher.

Bureau Central de la Commission Electrotechnique Internationale 3, rue de Varembe Genève, Suisse

Code prix 7
Price code

Pour prix, voir catalogue en vigueur
For price, see current catalogue

INTERNATIONAL ELECTROTECHNICAL COMMISSION

SPECIFICATION FOR FLEXIBLE INSULATING SLEEVING

Part 3: Specification requirements for individual types of sleeving
Sheets 403 to 405: Glass textile sleeving with acrylic based coating

FOREWORD

- 1) The formal decisions or agreements of the IEC on technical matters, prepared by Technical Committees on which all the National Committees having a special interest therein are represented, express, as nearly as possible, an international consensus of opinion on the subjects dealt with.
- 2) They have the form of recommendations for international use and they are accepted by the National Committees in that sense.
- 3) In order to promote international unification, the IEC expresses the wish that all National Committees should adopt the text of the IEC recommendation for their national rules in so far as national conditions will permit. Any divergence between the IEC recommendation and the corresponding national rules should, as far as possible, be clearly indicated in the latter.

PREFACE

This standard has been prepared by Sub-Committee 15C: Specifications, of IEC Technical Committee No. 15: Insulating materials.

The text of this standard is based upon the following documents:

Six Months' Rule	Report on Voting
15C(CO)200	15C(CO)219

Full information on the voting for the approval of this standard can be found in the Voting Report indicated in the above table.

The following IEC publication is quoted in this standard:

Publication No. 757 (1983): Code for designation of colours.

SPECIFICATION FOR FLEXIBLE INSULATING SLEEVING

Part 3: Specification requirements for individual types of sleeving Sheets 403 to 405: Glass textile sleeving with acrylic based coating

INTRODUCTION

This standard is one of a series which deals with flexible insulating sleeving for electrical purposes. This 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 three of the sheets comprising Part 3, as follows:

- Sheet 403: Glass textile sleeving with acrylic based coating: high breakdown strength;
- Sheet 404: Glass textile sleeving with acrylic based coating: medium breakdown strength;
- Sheet 405: Glass textile sleeving with acrylic based coating: lower breakdown strength.

1. Scope

This standard gives requirements for E type glass sleeving using either braided or knitted construction with a continuous acrylic based coating.

The sleeving is normally available in bore sizes 0.5 mm to 25 mm and in the following colours:

black, white, red, yellow, blue, brown, green and green/yellow and natural.

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 684-3-403 (or 404 or 405) — nominal bore size in millimetres with suffix* indicating tolerance type — colour.

In those cases where the designation is required to differentiate between sleeving which is braided and sleeving which is knitted, the appropriate word shall be added at the end of the designation.

For example: IEC 684-3-403-1.5 U-black-braided.

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

3. Requirements

Sleeving shall comply with the general requirements given in IEC Publication 684-1, and in addition, the labelling shall indicate whether the construction of the sleeving is knitted or braided.

Sleeving shall comply with the dimensional requirements in Table I and with the other requirements in Table II.

4. Thermal classification

Experience of product performance indicates that sleeving may be suitable for inclusion in systems for operation up to 155 °C.

* "B" indicates bilateral and "U" indicates unilateral tolerance.

TABLE I
Dimensional requirements

Nominal bore diameter (mm)	Tolerance on bore diameter (mm)		Wall thickness (mm)					
	Bilateral	Unilateral (+)	Sheet 403		Sheet 404		Sheet 405	
			Minimum	Maximum	Minimum	Maximum	Minimum	Maximum
0.3	±0.10	0.20	0.25	0.50	0.20	0.50	0.15	0.50
0.5	±0.10	0.20	0.25	0.50	0.20	0.50	0.15	0.50
0.8	±0.10	0.20	0.25	0.50	0.20	0.50	0.15	0.50
1.0	±0.15	0.30	0.25	0.75	0.20	0.75	0.15	0.75
1.5	±0.15	0.30	0.35	0.75	0.20	0.75	0.15	0.75
2.0	±0.20	0.40	0.35	0.75	0.20	0.75	0.15	0.75
2.5	±0.20	0.40	0.40	0.75	0.20	0.75	0.15	0.75
3.0	±0.25	0.50	0.40	0.75	0.20	0.75	0.15	0.75
4.0	±0.25	0.50	0.50	0.75	0.30	0.75	0.20	0.75
5.0	±0.25	0.50	0.50	0.75	0.30	0.75	0.20	0.75
6.0	±0.25	0.50	0.50	0.75	0.30	0.75	0.20	0.75
8.0	±0.50	1.0	0.50	0.75	0.30	0.75	0.20	0.75
10.0	±0.50	1.0	0.65	1.0	0.40	0.90	0.40	0.75
12.0	±0.50	1.0	0.65	1.0	0.40	0.90	0.40	0.75
16.0	±0.50	1.0	0.65	1.0	0.40	0.90	0.40	0.75
20.0	±0.50	1.0	0.65	1.2	0.40	0.90	0.40	0.75
25.0	±0.50	1.0	0.65	1.2	0.40	1.0	0.40	0.75

Notes 1. - Measurements should be made to the nearest 0.05 mm.

2. - The required form of tolerance should be indicated as described in Clause 2.

(standards.iteh.ai)

SIST HD 523.3.403 to 405 S1:1998

<https://standards.iteh.ai/catalog/standards/sist/234b5c41-e43b-4d2d-a19c-4649602a33b/sist-hd-523-3-403-to-405-s1-1998>

TABLE II
Requirements

Property	Publication 684-2 Clause	Units	Maximum or minimum	Requirements			Remarks
				Sheet 403	Sheet 404	Sheet 405	
Resistance to sol- dering heat	7	—	—	Pass	Pass	Pass	Only for sleeving having nominal bore diameter up to and including 5 mm
Bending after heating	13	—	—	No cracking or detachment of coating shall be visible and the original colour shall be clearly recognizable	No cracking or detachment of coating shall be visible and the original colour shall be clearly recognizable	No cracking or detachment of coating shall be visible and the original colour shall be clearly recognizable	Test temperature: 180 ± 3 °C Mandrel dia- meters are given in Table III
Bending at low temperature	14	—	—	No cracking or detachment of coating shall be visible	No cracking or detachment of coating shall be visible	No cracking or detachment of coating shall be visible	Test temperature not above - 15 °C Mandrel dia- meters are given in Table III
Hydrolysis of coating	17			No running of the coating, adher- ence between sleeving and paper, between the pieces of sleeving or any sign of discolou- ration of the paper	No running of the coating, adher- ence between sleeving and paper, between the pieces of sleeving or any sign of discolou- ration of the paper	No running of the coating, adher- ence between sleeving and paper, between the pieces of sleeving or any sign of discolou- ration of the paper	
Breakdown vol- tage	21	kV	Min.	See Table IV	See Table IV	See Table IV	
Insulation resist- ance	22.4.2	MΩ	Min.	10 ³	10 ³	10 ³	
Flame propaga- tion	26 Method A	s	Max.	60	60	60	In addition, the indicator flag on any one of the three test speci- mens shall not be burned nor shall flaming or glowing particles or flaming drops ignite the cotton