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Plastslang – Icke formstabil textilarmerad vattenslang för allmänna ändamål – Specifikation (ISO 8029:2014)

Plastics hose – General-purpose collapsible water hose, textile-reinforced – Specification (ISO 8029:2014)

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Denna standard ersätter SS-EN ISO 8029:2010, utgåva 1.

The European Standard EN ISO 8029:2014 has the status of a Swedish Standard. This document contains the official version of EN ISO 8029:2014.

This standard supersedes the Swedish Standard SS-EN ISO 8029:2010, edition 1.

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EUROPEAN STANDARD

EN ISO 8029

NORME EUROPÉENNE

EUROPÄISCHE NORM

August 2014

ICS 23.040.70

Supersedes EN ISO 8029:2010

English Version

Plastics hose - General-purpose collapsible water hose, textile-reinforced - Specification (ISO 8029:2014)

Tuyaux plastiques - Tuyaux d'eau écrasables d'usage général renforcés textiles - Spécifications (ISO 8029:2014)

Kunststoffschlauch - Faltbarer Wasserschlauch mit Textileinlage für allgemeine Anwendung - Anforderung (ISO 8029:2014)

This European Standard was approved by CEN on 17 April 2014.

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Foreword

This document (EN ISO 8029:2014) has been prepared by Technical Committee ISO/TC 45 “Rubber and rubber products” in collaboration with Technical Committee CEN/TC 218 “Rubber and plastics hoses and hose assemblies” the secretariat of which is held by BSI.

This European Standard shall be given the status of a national standard, either by publication of an identical text or by endorsement, at the latest by February 2015, and conflicting national standards shall be withdrawn at the latest by February 2015.

Attention is drawn to the possibility that some of the elements of this document may be the subject of patent rights. CEN [and/or CENELEC] shall not be held responsible for identifying any or all such patent rights.

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Endorsement notice

The text of ISO 8029:2014 has been approved by CEN as EN ISO 8029:2014 without any modification.

Introduction

This International Standard has been prepared to provide minimum requirements for the satisfactory performance of textile-reinforced thermoplastic collapsible water hose, for discharge applications, conveying water, aqueous sludge or slurries.

In view of such applications, requirements and the corresponding tests have been specified for exposure to laboratory light sources (see [8.2.5](#)) and for abrasion resistance (see [8.2.6](#)).

Plastics hose — General-purpose collapsible water hose, textile-reinforced — Specification

1 Scope

This International Standard specifies the requirements for four types of textile-reinforced thermoplastics collapsible water hoses for general applications for use in the temperature range of -10 °C to 55 °C . Such hoses are classified into four types, as follows:

- low pressure, designed for a maximum working pressure of up to $0,4\text{ MPa}$ ($4,0\text{ bar}$) at 23 °C and up to $0,2\text{ MPa}$ ($2,0\text{ bar}$) at 55 °C ;
- medium pressure, for a maximum working pressure of up to $0,7\text{ MPa}$ ($7,0\text{ bar}$) at 23 °C and up to $0,36\text{ MPa}$ ($3,6\text{ bar}$) at 55 °C ;
- high pressure, for a maximum working pressure of up to $1,0\text{ MPa}$ ($10,0\text{ bar}$) at 23 °C and up to $0,51\text{ MPa}$ ($5,1\text{ bar}$) at 55 °C ;
- extra-high pressure, for a maximum working pressure of up to $1,55\text{ MPa}$ ($15,5\text{ bar}$) at 23 °C and up to $0,79\text{ MPa}$ ($7,9\text{ bar}$) at 55 °C .

This International Standard does not apply to products used for fire-fighting or the conveyance of drinking water.

2 Normative references

The following documents, in whole or in part, are normatively referenced in this document and are indispensable for its application. For dated references, only the edition cited applies. For undated references, the latest edition of the referenced document (including any amendments) applies.

ISO 3, *Preferred numbers — Series of preferred numbers*

ISO 37, *Rubber, vulcanized or thermoplastic — Determination of tensile stress-strain properties*

ISO 188, *Rubber, vulcanized or thermoplastic — Accelerated ageing and heat resistance tests*

ISO 1307, *Rubber and plastics hoses — Hose sizes, minimum and maximum inside diameters, and tolerances on cut-to-length hoses*

ISO 1402, *Rubber and plastics hoses and hose assemblies — Hydrostatic testing*

ISO 8033, *Rubber and plastics hoses — Determination of adhesion between components*

ISO 8330, *Rubber and plastics hoses and hose assemblies — Vocabulary*

ISO 9352, *Plastics — Determination of resistance to wear by abrasive wheels*

ISO 10619-1, *Rubber and plastics hoses and tubing — Measurement of flexibility and stiffness — Part 1: Bending tests at ambient temperature*

ISO 10619-2, *Rubber and plastics hoses and tubing — Measurement of flexibility and stiffness — Part 2: Bending tests at sub-ambient temperatures*

ISO 23529, *Rubber — General procedures for preparing and conditioning test pieces for physical test methods*

ISO 30013, *Rubber and plastics hoses — Methods of exposure to laboratory light sources — Determination of changes in colour, appearance and other physical properties*

3 Terms and definitions

For the purposes of this document, the terms and definitions given in ISO 8330 apply.

4 Classification

Hoses are designated as one of the following four types depending on their pressure rating at the specified temperatures:

- Type A: Low working pressure hose, designed for a maximum working pressure of up to 0,4 MPa (4,0 bar) at 23 °C and up to 0,2 MPa (2,0 bar) at 55 °C;
- Type B: Medium working pressure hose, designed for a maximum working pressure of up to 0,7 MPa (7,0 bar) at 23 °C and up to 0,36 MPa (3,6 bar) at 55 °C;
- Type C: High working pressure hose, designed for a maximum working pressure of up to 1,0 MPa (10,0 bar) at 23 °C and up to 0,51 MPa (5,1 bar) at 55 °C;
- Type D: Extra high working pressure hose, designed for a maximum working pressure of up to 1,55 MPa (15,5 bar) at 23 °C and up to 0,79 MPa (7,9 bar) at 55 °C.

5 Couplings and end fittings

Hoses may be fitted with the appropriate coupling type and the end fitting to form hose assemblies. Guidance on coupling type is given in [Annex D](#) and ISO/TR 17784:2003, Clause 7: Couplings.

6 Materials and construction

The hose shall consist of:

- a) a flexible thermoplastic lining;
- b) a reinforcement made of natural or synthetic textile material, applied by any suitable technique; and
- c) a flexible thermoplastic cover.

The lining and the cover shall be of uniform thickness, fully gelled and free from visible cracks, porosity, foreign inclusions and other defects. The cover may have a smooth or fluted finish, and shall be abrasion-resistant.

7 Dimensions and tolerances

7.1 Inside diameter and tolerance

The inside diameter of the hose and the tolerance on the inside diameter shall meet the requirements of [Table 1](#).

Table 1 — Inside diameter and tolerance

Inside diameter (mm)	Tolerance on I.D. (mm)
19	±1,5
25	±1,5
26,5	±1,5
31,5	±1,5
33	±1,5
40	±2,0
41	±2,0
50	±2,0
52,5	±2,0
63	±2,0
65	±2,0
66	±2,0
75	±2,0
78	±2,0
80	±2,25
100	±2,25
104	±2,25
125	±3,0
128	±3,0
150	±3,0
155	±3,0
160	±3,0
200	±3,0
207	±3,0
250	±3,0
258	±3,0
300	±3,0
309	±3,0
350	±4,0
359	±4,0
400	±4,0
410	±4,0
If special cases call for extra sizes: — for smaller or larger dimensions, further numbers shall be chosen from the R10 series of preferred numbers (see ISO 3), with tolerances as given in ISO 1307; — for intermediate dimensions, numbers shall be chosen from the R20 series of preferred numbers (see ISO 3), with the tolerances as given for the next-larger size in the table above.	

7.2 Tolerance on length

If the cut length of the hose is less than or equal to 1 800 mm, the tolerance on length shall be as specified in ISO 1307.