



**International
Standard**

ISO 28017

**Rubber hoses and hose assemblies,
wire or textile reinforced,
for dredging applications —
Specification**

*Tuyaux et assemblages flexibles en caoutchouc, à armature textile
ou métallique, pour des applications de dragage — Spécifications*

**Fourth edition
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Foreword

ISO (the International Organization for Standardization) is a worldwide federation of national standards bodies (ISO member bodies). The work of preparing International Standards is normally carried out through ISO technical committees. Each member body interested in a subject for which a technical committee has been established has the right to be represented on that committee. International organizations, governmental and non-governmental, in liaison with ISO, also take part in the work. ISO collaborates closely with the International Electrotechnical Commission (IEC) on all matters of electrotechnical standardization.

The procedures used to develop this document and those intended for its further maintenance are described in the ISO/IEC Directives, Part 1. In particular, the different approval criteria needed for the different types of ISO document should be noted. This document was drafted in accordance with the editorial rules of the ISO/IEC Directives, Part 2 (see www.iso.org/directives).

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For an explanation of the voluntary nature of standards, the meaning of ISO specific terms and expressions related to conformity assessment, as well as information about ISO's adherence to the World Trade Organization (WTO) principles in the Technical Barriers to Trade (TBT), see www.iso.org/iso/foreword.html.

This document was prepared by Technical Committee ISO/TC 45, *Rubber and rubber products*, Subcommittee SC 1, *Rubber and plastics hoses and hose assemblies*, in collaboration with the European Committee for Standardization (CEN) Technical Committee CEN/TC 218, *Rubber and plastics hoses and hose assemblies*, in accordance with the Agreement on technical cooperation between ISO and CEN (Vienna Agreement).

This fourth edition cancels and replaces the third edition (ISO 28017:2018), which has been technically revised.

The main changes are as follows:

- revision of the ambient temperature range in [Clause 1](#);
- addition of a nominal size of 1 300 in [Table 1](#);
- addition of requirements for low-temperature brittleness in [Table 6](#).

Any feedback or questions on this document should be directed to the user's national standards body. A complete listing of these bodies can be found at www.iso.org/members.html.

Rubber hoses and hose assemblies, wire or textile reinforced, for dredging applications — Specification

1 Scope

This document specifies requirements for two types, seven classes and three grades of wire- or textile-reinforced dredging hoses with nominal sizes ranging from 100 to 1 300. Such hoses are suitable for the delivery or suction of seawater or freshwater mixed with silt, sand, coral and small stones with a specific gravity in the range from 1,0 to 2,3 at ambient temperature ranging from -10 °C to +40 °C or for low-temperature hoses (designated -LT) ranging from -20 °C to +40 °C.

This document covers two types of hose, as follows:

- type 1: floating type, for delivery only, which includes flotation material to give the hose buoyancy;
- type 2: submarine type for delivery and suction.

2 Normative references

The following documents are referred to in the text in such a way that some or all of their content constitutes requirements of this document. For dated references, only the edition cited applies. For undated references, the latest edition of the referenced document (including any amendments) applies.

ISO 34-2:2022, *Rubber, vulcanized or thermoplastic — Determination of tear strength — Part 2: Small (Delft) test pieces*

ISO 812:2017, *Rubber, vulcanized or thermoplastic — Determination of low-temperature brittleness*

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

ISO 1431-1, *Rubber, vulcanized or thermoplastic — Resistance to ozone cracking — Part 1: Static and dynamic strain testing*

ISO 4649:2024, *Rubber, vulcanized or thermoplastic — Determination of abrasion resistance using a rotating cylindrical drum device*

ISO 4662, *Rubber, vulcanized or thermoplastic — Determination of rebound resilience*

ISO 4671, *Rubber and plastics hoses and hose assemblies — Methods of measurement of the dimensions of hoses and the lengths of hose assemblies*

ISO 7233:2021, *Rubber and plastics hoses and hose assemblies — Determination of resistance to vacuum*

ISO 8033:2016, *Rubber and plastics hoses — Determination of adhesion between components*

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

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

3 Terms and definitions

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

ISO and IEC maintain terminology databases for use in standardization at the following addresses: