
**Rubber and plastics inlet hoses
and hose assemblies for washing-
machines and dishwashers —
Specification**

*Tuyaux et flexibles en caoutchouc et en plastique pour l'alimentation
des machines à laver et lave-vaisselle — Spécifications*





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Foreword

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This document was prepared by Technical Committee ISO/TC 45, *Rubber and rubber products*, Subcommittee SC 1, *Rubber and plastics hoses and hose assemblies*.

This fifth edition cancels and replaces the fourth edition (ISO 6804:2016), which has been technically revised:

The main changes are as follows:

- the dates of some references have been updated (i.e. ISO 7326:2016, ISO 10619-1:2017);
- [subclause 8.6](#) has been updated and corrected from 3,15 MPa (31,5 bar) to 2,1 MPa (21 bar);
- the mention of the publication year has been removed from [Clause 11](#).

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 and plastics inlet hoses and hose assemblies for washing-machines and dishwashers — Specification

1 Scope

This document specifies the requirements for three types of rubber or plastics inlet hoses and hose assemblies for washing-machines and dishwashers connected to the domestic water supply at a pressure not exceeding 1 MPa (10 bar).

This document is applicable to the following types of hose:

- type 1: rubber hoses for unheated water supply (maximum temperature 70 °C);
- type 2: rubber hoses for heated water supply (maximum temperature 90 °C);
- type 3: plastics hoses for unheated water supply (maximum temperature 60 °C).

NOTE National requirements for hose fittings and hoses conveying drinking water can apply.

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

ISO 4892 (all parts), *Plastics — Methods of exposure to laboratory light sources*

ISO 7326:2016, *Rubber and plastics hoses — Assessment of ozone resistance under static conditions*

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

ISO 10619-1:2017, *Rubber and plastics hoses and tubing — Measurement of flexibility and stiffness — Part 1: Bending tests at ambient temperature*

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

3 Terms and definitions

For the purposes of this document, the terms and definitions given in ISO 10619 apply.

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

- ISO Online browsing platform: available at <https://www.iso.org/obp>
- IEC Electropedia: available at <https://www.electropedia.org/>

4 Classification

Hoses are designated as one of the following three types, depending on the hose material and the temperature of the water supply:

- type 1: rubber hoses for a medium-temperature water supply (up to 70 °C) – for a maximum working pressure of 1 MPa (10 bar);
- type 2: rubber hoses for a high-temperature water supply (up to 90 °C) – for a maximum working pressure of 1 MPa (10 bar);
- type 3: plastics hoses for low temperature (up to 60 °C) water supply – for a maximum working pressure of 0,8 MPa (8 bar).

5 Couplings and fittings

Hoses may be fitted with the appropriate type of coupling and end fitting to form hose assemblies.

NOTE Guidance on coupling types is given in ISO/TR 17784.

6 Materials and construction

The hose construction shall be as follows.

- a) The hose lining shall consist of rubber for type 1 and type 2 or thermoplastics material for type 3.
- b) The hose reinforcement shall consist of natural or synthetic textile material applied by any suitable technique.
- c) The hose cover shall consist of an ozone-resistant rubber for type 1 and type 2 or a weather-resistant thermoplastics material for type 3. Alternatively, a stainless-steel braid may be used instead of a cover.

The lining and the cover shall be of uniform thickness, concentric, fully gelled and free from visible cracks, porosity, foreign inclusions and other defects which can cause the hose to be unserviceable.

7 Dimensions and tolerances

7.1 Inside diameters, tolerances and minimum wall thickness

7.1.1 Type 1 and type 2 hoses

The preferred values for the bore of the hose are 10 mm and 12,5 mm.

The tolerances on the bore depend on the characteristics of the end fittings; consequently, they shall be agreed between the manufacturer of the hose and the constructor of the hose assembly but shall not exceed the maximum tolerances specified in ISO 1307.

7.1.2 Type 3 hoses

When measured in accordance with ISO 4671, the inside diameter and minimum wall thickness of the hose shall meet the requirements specified in [Table 1](#).