
**Rubber hoses and hose assemblies for
automobile power-steering systems —
Specification**

*Tuyaux et flexibles en caoutchouc pour circuits de direction
assistée — Spécifications*



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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 documents 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 & Rubber Products, Subcommittee SC 1, Rubber and plastics hoses and hose assemblies

This second edition cancels and replaces the first edition (ISO 11425:1996), of which it constitutes a minor revision.

The main changes compared to the previous edition are as follows:

- In Clause 2, normative references have been updated.

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 for automobile power-steering systems — Specification

WARNING — Attention is drawn to the need to ensure that appropriate precautions are taken to ensure the safety of personnel carrying out the methods of test specified in this document.

1 Scope

This document specifies requirements for five types of hose and hose assembly used in automobile power-steering systems, the five types differing in their pressure ratings and volumetric expansion. They are for use with fluids in the temperature range $-40\text{ }^{\circ}\text{C}$ to $+135\text{ }^{\circ}\text{C}$.

This document is based on performance tests. In order to take account of technological developments, no requirements are included for specific materials, detailed construction or manufacturing methods.

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

ISO 2719, *Determination of flash point — Pensky-Martens closed cup method*

ISO 2909, *Petroleum products — Calculation of viscosity index from kinematic viscosity*

ISO 2977, *Petroleum products and hydrocarbon solvents — Determination of aniline point and mixed aniline point*

ISO 3016, *Petroleum products — Determination of pour point*

ISO 3819, *Laboratory glassware — Beakers*

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

ISO 4788, *Laboratory glassware — Graduated measuring cylinders*

ISO 4793, *Laboratory sintered (fritted) filters — Porosity grading, classification and designation*

ISO 6803, *Rubber or plastics hoses and hose assemblies — Hydraulic-pressure impulse test without flexing*

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

ISO 9227, *Corrosion tests in artificial atmospheres — Salt spray tests*

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

ISO/TR 11340:1994, *Rubber and rubber products — Hydraulic hose assemblies — External leakage classification for hydraulic systems*