
**Filters for compressed air — Methods
of test —**

**Part 4:
Water**

*Filtres pour air comprimé — Méthodes d'essai —
Partie 4: Eau*



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Published in Switzerland

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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.

International Standards are drafted in accordance with the rules given in the ISO/IEC Directives, Part 2.

The main task of technical committees is to prepare International Standards. Draft International Standards adopted by the technical committees are circulated to the member bodies for voting. Publication as an International Standard requires approval by at least 75 % of the member bodies casting a vote.

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

ISO 12500-4 was prepared by Technical Committee ISO/TC 118, *Compressors and pneumatic tools, machines and equipment*, Subcommittee SC 4, *Quality of compressed air*.

ISO 12500 consists of the following parts, under the general title *Filters for compressed air — Test methods*:

- *Part 1: Oil aerosols*
- *Part 2: Oil vapours*
- *Part 3: Particulates*
- *Part 4: Water*

Introduction

Water is a typical contaminant found in compressed air streams. Water-removal devices are designed to remove water from compressed air.

The most important performance characteristics are the ability of the water-removal devices to remove water from the air stream and the amount of pressure drop resulting from the process.

This part of ISO 12500 provides a means of comparing the performance of water removal devices.

Filters for compressed air — Methods of test —

Part 4: Water

1 Scope

The test method described in this part of ISO 12500 is designed to determine the water-removal efficiency and operational pressure drop of any device designed for water removal from compressed air described as wall flow in accordance with ISO 8573-2.

2 Normative references

The following referenced documents are indispensable for the application 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 1219-1:2006, *Fluid power systems and components — Graphic symbols and circuit diagrams — Part 1: Graphic symbols for conventional use and data-processing applications*

ISO 5598, *Fluid power systems and components — Vocabulary*

ISO 8573-1:2001, *Compressed air — Part 1: Contaminants and purity classes*

ISO 8573-2, *Compressed air — Part 2: Test methods for oil aerosol content*

3 Terms and definitions

For the purposes of this document, the terms and definitions given in ISO 8573-1 and ISO 5598 apply.

4 Units and symbols

General use of SI units (Système international d'unités; see ISO 1000) as given throughout this International Standard is recommended. However, in agreement with accepted practice in the pneumatic field, some non-preferred SI units, accepted by ISO as a dual reference, are also used.

$$1 \text{ bar} = 100\,000 \text{ Pa}$$

NOTE bar(e) is used to indicate effective pressure above atmospheric.

$$1 \text{ L (litre)} = 0,001 \text{ m}^3.$$

Symbols used are generally in accordance with ISO 1219-1.