INTERNATIONAL STANDARD



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Vacuum technology — Vocabulary —

Part 3: Total and partial pressure vacuum gauges

Technique du vide — Vocabulaire —

Partie 3: Manomètres de pression totale et analyseurs de pressions partielles



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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 on the meaning of ISO specific terms and expressions related to conformity assessment, as well as information about ISO's adherence to the WTO principles in the Technical Barriers to Trade (TBT) see the following URL: Foreword - Supplementary information

The committee responsible for this document is ISO/TC 112, Vacuum technology.

This second edition cancels and replaces the first edition (ISO 3529-3:1981), which has been technically revised in order to include terms of now common vacuum gauges and to adapt terms to new developments and general use of terms in publications.

ISO 3529 consists of the following parts, under the general title *Vacuum technology — Vocabulary*:

- Part 1: General terms
- Part 2: Vacuum pumps and related terms
- Part 3: Total and partial pressure vacuum gauges

Vacuum technology — Vocabulary —

Part 3: Total and partial pressure vacuum gauges

1 Scope

This part of ISO 3529 gives definitions of total and partial pressure vacuum gauges. It is a continuation of ISO 3529-1, which defines general terms used in vacuum technology, and of ISO 3529-2, which gives definitions of vacuum pumps and related terms.

The terms for those gauges are defined, which had been either very important in the past or are important today and normally commercially available or which physical principle is important still today.

2 Terms and definitions

For the purposes of this document, the following terms and definitions apply.

NOTE A tree diagram of total pressure vacuum gauges is illustrated in <u>Figure A.1</u>.

2.1 General terms

2.1.1

pressure gauge

instrument for measuring gas or vapour pressures, greater, equal to or less than the prevailing atmospheric pressure

2.1.2

vacuum gauge

instrument for measuring gas or vapour pressures less than the prevailing atmospheric pressure

Note 1 to entry: A vacuum gauge is a subset of a pressure gauge.

Note 2 to entry: Some types of vacuum gauges commonly in use do not actually measure a pressure (as expressed in terms of a force acting on a surface), but some other physical quantity related to pressure, under specific conditions.

2.1.2.1

gauge head

<of certain types of gauge> part of the gauge which contains the pressure-sensitive element and which is directly connected to the vacuum system

2.1.2.1.1

nude gauge gauge head without an envelope

Note 1 to entry: In this case, the sensitive element is inserted directly into the vacuum system. 🌽

2.1.2.2 control unit controller

<of certain types of gauge> part of the gauge containing the power supply and all electrical circuitry necessary for the operation of the gauge