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Guidelines for the use of ISO 5167:2022

National foreword

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ISO copyright office
CP 401 • Ch. de Blandonnet 8
CH-1214 Vernier, Geneva
Phone: +41 22 749 01 11
Email: copyright@iso.org
Website: www.iso.org

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Contents

Page

Foreword ..... **v**
Introduction ..... **vi**
1 Scope **1**
2 Normative references **1**
3 Terms and definitions **1**
4 How the structure of this guide relates to the ISO 5167:2022 series **1**
5 Guidance on the use of the ISO 5167:2022 series **2**
5.1 Guidance specific to the use of ISO 5167-1:2022 2
5.1.1 Scope 2
5.1.2 Normative references 2
5.1.3 Terms and definitions 2
5.1.4 Symbols and subscripts 2
5.1.5 Principle of the method of measurement and computation 2
5.1.6 General requirements for the measurements 4
5.1.7 Installation requirements 5
5.1.8 Uncertainty on the measurement of flowrate 7
5.2 Guidance specific to the use of ISO 5167-2:2022 7
5.2.1 Scope 7
5.2.2 Normative references 7
5.2.3 Terms, definitions and symbols 8
5.2.4 Principles of the method of measurement and computation 8
5.2.5 Orifice plates 8
5.2.6 Installation requirements 15
5.2.7 Flow calibration of orifice meters 21
5.3 Guidance specific to the use of ISO 5167-3:2022 21
5.3.1 Scope 21
5.3.2 Normative references 21
5.3.3 Terms and definitions 21
5.3.4 Principles of the method of measurement and computation 22
5.3.5 Nozzles and Venturi nozzles 22
5.3.6 Installation requirements 22
5.3.7 Flow calibration of nozzles 22
5.4 Guidance specific to the use of ISO 5167-4:2022 22
5.5 Guidance specific to the use of ISO 5167-5:2022 22
5.6 Guidance specific to the use of ISO 5167-6:2022 22
6 Information of a general nature relevant to the application of ISO 5167:2022 (all parts) **23**
6.1 Secondary instrumentation 23
6.1.1 General 23
6.1.2 General requirements concerning installation of secondary instruments 23
6.2 Measurement of pressure and differential pressure 25
6.2.1 General 25
6.2.2 Connections for pressure signal transmissions between primary and secondary elements 25
6.2.3 Pressure measurement devices 25
6.3 Measurement of temperature 27
6.3.1 General 27
6.3.2 Fundamentals of measuring the temperature of a moving fluid 27
6.3.3 Sensor installation 28
6.3.4 Precautions for accurate measurement 28
6.3.5 Restrictions on thermowells 29
6.3.6 Additional precautions in the case of fluctuating temperatures 29

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6.3.7 Devices for temperature measurement 29
6.4 Determination of density 31
6.4.1 General 31
6.4.2 Installation of density transducers 32
6.4.3 Additional method for the determination of the density of gas 35
6.4.4 Special consideration concerning gas density 35
6.4.5 Special considerations concerning liquid density 35
6.5 Electrical supply and electrical installations 36
6.5.1 Potentially explosive atmospheres 36
6.5.2 Cabling 36
6.5.3 Electronic equipment 36
Annex A (informative) **Principles of measurement and computation** **37**
Annex B (informative) **Computation of compressibility factor for natural gases** **53**
Annex C (informative) **Orifice plate assembly** **54**
Bibliography **63**

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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 30, *Measurement of fluid flow in closed conduits*, Subcommittee SC 2, *Pressure differential devices*.

This third edition cancels and replaces the second edition (ISO/TR 9464:2008), which has been technically revised.

The main changes are as follows:

— this document has been revised to be consistent with ISO 5167:2022;

— this document is consistent with ISO/IEC Guide 98-3;

— the subclause on pressure transmitters has 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.

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Introduction

The objective of this document is to assist users of ISO 5167, which was published in 2022 in six parts. Guidance on particular clauses of ISO 5167:2022 is given.

Some clauses of ISO 5167:2022 series are not commented upon and the corresponding clause numbers are therefore omitted from this document, except when it has been thought to be useful to keep a continuous numbering of paragraphs.

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Guidelines for the use of ISO 5167:2022

1 Scope

The objective of this document is to provide guidance on the use of ISO 5167:2022 series. ISO 5167:2022 is an International Standard for flow measurement based on the differential pressure generated by a constriction introduced into a circular conduit (see ISO 5167-1:2022, 5.1). It presents a set of rules and requirements based on theory and experimental work undertaken in the field of flow measurement.

For a more detailed description of the scope, reference is made to ISO 5167-1:2022, Clause 1. Definitions and symbols applicable to this document are given in ISO 5167-1:2022, Clauses 3 and 4.

Neither ISO 5167-1:2022 nor this document gives detailed theoretical background, for which reference is made to any general textbook on fluid flow.

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 4006, *Measurement of fluid flow in closed conduits — Vocabulary and symbols*

3 Terms and definitions

For the purposes of this document, the terms and definitions given in ISO 4006 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 How the structure of this guide relates to the ISO 5167:2022 series

Clause 5 of this document sets out the guidance specific to each of the six parts of ISO 5167:2022:

— 5.1 covers part 1;

— 5.2 covers part 2;

— 5.3 covers part 3;

— 5.4 covers part 4;

— 5.5 covers part 5;

— 5.6 covers part 6.

Subsequent subclause numbering relates to the clauses in each of the parts. Hence, 5.1.1 covers Clause 1 in ISO 5167-1:2022; 5.2.6.4.3 covers 6.4.3 in ISO 5167-2:2022.

Guidance applicable to all six parts is given in Clause 6.

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