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**Liquid hydrocarbons — Volumetric  
measurement by displacement meter**

*Hydrocarbures liquides — Mesurage volumétrique au moyen de  
compteurs à chambre mesureuse*

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ISO copyright office  
Ch. de Blandonnet 8 • CP 401  
CH-1214 Vernier, Geneva, Switzerland  
Tel. +41 22 749 01 11  
Fax +41 22 749 09 47  
[copyright@iso.org](mailto:copyright@iso.org)  
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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](http://www.iso.org/directives)).

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. Details of any patent rights identified during the development of the document will be in the Introduction and/or on the ISO list of patent declarations received (see [www.iso.org/patents](http://www.iso.org/patents)).

Any trade name used in this document is information given for the convenience of users and does not constitute an endorsement.

For an explanation on 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 the following URL: [www.iso.org/iso/foreword.html](http://www.iso.org/iso/foreword.html).

This document was prepared by Technical Committee ISO/TC 28, *Petroleum and related products, fuels and lubricants from natural or synthetic sources*, Subcommittee SC 2, *Measurement of petroleum and related products*, in collaboration with Technical Committee ISO/TC 30, *Measurement of fluid flow in closed conduits*.

This second edition cancels and replaces the first edition (ISO 2714:1980), which has been technically revised.

## Introduction

This document gives recommendations on the design, installation, operation and maintenance of positive displacement meter systems used for liquid measurement. This widens the application scope from the previous document, which was primarily aimed at hydrocarbon custody transfer applications. The guidance now applies to all suitable liquids measured across different applications and industry sectors.

Displacement meters are extensively used in general fluid measurement in addition to fiscal, custody transfer and legal metrology applications involving hydrocarbon and non-hydrocarbon products. These can range from the light products such as gasoline, through to higher viscosity fluids.

The document has an extended scope from the first edition to cover applications for a wider range of liquids and duties and to remove restriction to hydrocarbon liquids. It now provides guidance, rather than mandatory requirements, on performance to allow meters to be specified and verified to meet relevant regulatory, fiscal and custody transfer specifications. The document also now includes additional meter designs. This revision has been achieved through the participation of ISO/TC 30 in the preparation, hence, providing a single standard for the measurement of flowing liquids using positive displacement flowmeters.

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