ICS 75.060 SLOVENSKÁ TECHNICKÁ NORMA December 2022

STN	**Zemný plyn** **Stanovenie obsahu vody Fischerovou metódou** **Časť 2: Titračný postup (ISO 10101-2: 2022)**	**STN** **EN ISO 10101-2** 38 5531

Natural gas - Determination of water by the Karl Fischer method - Part 2: Volumetric procedure (ISO 10101-2:2022)

Táto norma obsahuje anglickú verziu európskej normy.
This standard includes the English version of the European Standard.

Táto norma bola oznámená vo Vestníku ÚNMS SR č. 11/22

Obsahuje: EN ISO 10101-2:2022, ISO 10101-2:2022

Oznámením tejto normy sa ruší
STN EN ISO 10101-2 (38 5531) z novembra 2000

135910

EUROPEAN STANDARD

NORME EUROPÉENNE

EUROPÄISCHE NORM

EN ISO 10101-2

September 2022

ICS 75.060

Supersedes EN ISO 10101-2:1998

English Version

Natural gas - Determination of water by the Karl Fischer method - Part 2: Volumetric procedure (ISO 10101-2:2022)

Gaz naturel - Dosage de l'eau par la méthode de Karl Fischer - Partie 2: Méthode volumétrique (ISO 10101-2:2022)

Erdgas - Bestimmung des Wassergehaltes nach Karl Fischer - Teil 2: Volumetrisches Verfahren (ISO 10101-2:2022)

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EUROPEAN COMMITTEE FOR STANDARDIZATION
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EUROPÄISCHES KOMITEE FÜR NORMUNG

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Ref. No. EN ISO 10101-2:2022 E

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European foreword

This document (EN ISO 10101-2:2022) has been prepared by Technical Committee ISO/TC 193 "Natural gas" in collaboration with Technical Committee CEN/TC 238 “Test gases, test pressures, appliance categories and gas appliance types” the secretariat of which is held by AFNOR.

This European Standard shall be given the status of a national standard, either by publication of an identical text or by endorsement, at the latest by March 2023, and conflicting national standards shall be withdrawn at the latest by March 2023.

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

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Endorsement notice

The text of ISO 10101-2:2022 has been approved by CEN as EN ISO 10101-2:2022 without any modification.

INTERNATIONAL STANDARD

ISO 10101-2

Second edition
2022-08

Natural gas — Determination of water by the Karl Fischer method —

Part 2: Volumetric procedure

Gaz naturel — Dosage de l'eau par la méthode de Karl Fischer — Partie 2: Méthode volumétrique

Reference number
ISO 10101-2:2022(E)

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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.

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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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.

This document was prepared by Technical Committee ISO/TC 193, *Natural Gas*, Subcommittee SC 1, *Analysis of natural gas,* in collaboration with the European Committee for Standardization (CEN) Technical Committee CEN/TC 238, *Test gases, test pressures, appliance categories and gas appliance types,* in accordance with the Agreement on technical cooperation between ISO and CEN (Vienna Agreement).

This second edition cancels and replaces the first edition (ISO 10101-2:1993), which has been technically revised.

The main changes are as follows:

— Clause 2 and Bibliography were revised;

— New fixed structure numbering inserted;

— Clause 5 was modified;

— Clause 9 was modified;

— 10.2 was modified.

A list of all parts in the ISO 10101 series can be found on the ISO website.

Introduction

Water vapour may be present in natural gas due to, for example, natural occurrence in the well production stream, the storage of gas in underground reservoirs, transmission or distribution through mains containing moisture or other reasons.

INTERNATIONAL STANDARD **ISO 10101-2:2022(E)**

Natural gas — Determination of water by the Karl Fischer method —

Part 2: Volumetric procedure

WARNING — Local safety regulations should be taken into account, when the equipment is located in hazardous areas.

1 Scope

This document specifies a volumetric procedure for the determination of water content in natural gas. Volumes are expressed in cubic metres at a temperature of 273,15 K (0 °C) and a pressure of 101,325 kPa (1 atm). It applies to water concentrations between 5 mg/m^3 and 5 000 mg/m^3.

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 383, *Laboratory glassware — Interchangeable conical ground joints*

ISO 10101-1, *Natural gas- Determination of water by the Karl Fischer method – Part 1- Introduction*

ISO 14532, *Natural gas — Vocabulary*