ICS 17.020, 71.040, 71.120 SLOVENSKÁ TECHNICKÁ NORMA Apríl 2014

STN	**Špecifikácia prevádzkových vlastností fluorometrických analyzátorov kyslíka v kvapalných médiách.**	**STN EN 62703** 25 7401

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

Obsahuje: EN 62703:2013, IEC 62703:2013

118776

Úrad pre normalizáciu, metrológiu a skúšobníctvo SR, odbor SÚTN, 2014
Podľa zákona č. 264/1999 Z. z. v znení neskorších predpisov sa môžu slovenské technické normy rozmnožovať a rozširovať iba so súhlasom Úradu pre normalizáciu, metrológiu a skúšobníctvo SR.

EUROPEAN STANDARD

NORME EUROPÉENNE

EUROPÄISCHE NORM

EN 62703

August 2013

ICS 17.020; 71.040; 71.120

English version

Expression of performance of fluorometric oxygen analyzers in liquid media
(IEC 62703:2013)

Expression des performances des analyseurs d'oxygène fluormétriques en milieu liquide
(CEI 62703:2013)

Angabe zum Betriebsverhalten von fluorometrischen Sauerstoffanalysatoren in flüssigen Medien
(IEC 62703:2013)

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Comité Européen de Normalisation Electrotechnique
Europäisches Komitee für Elektrotechnische Normung

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Ref. No. EN 62703:2013 E

Foreword

The text of document 65B/867/FDIS, future edition 1 of IEC 62703, prepared by IEC/TC 65B "Measurement and control devices, of IEC technical committee 65: Industrial-process measurement, control and automation" was submitted to the IEC-CENELEC parallel vote and approved by CENELEC as EN 62703:2013.

The following dates are fixed:

• latest date by which the document has to be implemented at national level by publication of an identical national standard or by endorsement	(dop)	2014-05-01
• latest date by which the national standards conflicting with the document have to be withdrawn	(dow)	2016-08-01

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The text of the International Standard IEC 62703:2013 was approved by CENELEC as a European Standard without any modification.

In the official version, for Bibliography, the following notes have to be added for the standards indicated:

IEC 60654 (all parts)	NOTE	Harmonised as EN 60654 (all parts).
IEC 60654-1	NOTE	Harmonised as EN 60654-1.
IEC 60770-1	NOTE	Harmonised as EN 60770-1.
IEC 61207-1:2010	NOTE	Harmonised as EN 61207-1:2010.
IEC 61207-2	NOTE	Harmonised as EN 61207-2.
IEC 61298 (all parts)	NOTE	Harmonised as EN 61298 (all parts).
IEC 61326 (all parts)	NOTE	Harmonised as EN 61326 (all parts).
ISO 5814:2012	NOTE	Harmonised as EN ISO 5814:2012.
ISO 7888:1985	NOTE	Harmonised as EN 27888:1993.
ISO 9001	NOTE	Harmonised as EN ISO 9001.
ISO 80000-1:2009	NOTE	Harmonised as EN ISO 80000-1:2013.

Annex ZA
(normative)
Normative references to international publications with their corresponding European publications

The following documents, in whole or in part, are normatively referenced in this document and are indispensable for its application. For dated references, only the edition cited applies. For undated references, the latest edition of the referenced document (including any amendments) applies.

NOTE When an international publication has been modified by common modifications, indicated by (mod), the relevant EN/HD applies.

Publication	Year	Title	EN/HD	Year
IEC 60068	series	Environmental testing	EN 60068	series
IEC 60359	2001	Electrical and electronic measurement equipment - Expression of performance	EN 60359	2002
IEC 61010-1	-	Safety requirements for electrical equipment for measurement, control and laboratory use - Part 1: General requirements	-	-
IEC 61187 (mod)	-	Electrical and electronic measuring equipment - Documentation	EN 61187 + Corr. March	-

IEC 62703

Edition 1.0 2013-06

INTERNATIONAL STANDARD

NORME INTERNATIONALE

Expression of performance of fluorometric oxygen analyzers in liquid media

Expression des performances des analyseurs d'oxygène fluorométriques en milieu liquide

IEC 62703:2013

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IEC 62703

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INTERNATIONAL STANDARD

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Expression of performance of fluorometric oxygen analyzers in liquid media

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INTERNATIONAL
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INTERNATIONAL ELECTROTECHNICAL COMMISSION

EXPRESSION OF PERFORMANCE OF FLUOROMETRIC OXYGEN ANALYZERS IN LIQUID MEDIA

FOREWORD

1) The International Electrotechnical Commission (IEC) is a worldwide organization for standardization comprising all national electrotechnical committees (IEC National Committees). The object of IEC is to promote international co-operation on all questions concerning standardization in the electrical and electronic fields. To this end and in addition to other activities, IEC publishes International Standards, Technical Specifications, Technical Reports, Publicly Available Specifications (PAS) and Guides (hereafter referred to as "IEC Publication(s)"). Their preparation is entrusted to technical committees; any IEC National Committee interested in the subject dealt with may participate in this preparatory work. International, governmental and non-governmental organizations liaising with the IEC also participate in this preparation. IEC collaborates closely with the International Organization for Standardization (ISO) in accordance with conditions determined by agreement between the two organizations.
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International Standard IEC 62703 has been prepared by subcommittee 65B: Measurement and control devices, of IEC technical committee 65: Industrial-process measurement, control and automation.

The text of this standard is based on the following documents:

FDIS	Report on voting
65B/867/FDIS	65B/871/RVD

Full information on the voting for the approval of this standard can be found in the report on voting indicated in the above table.

This publication has been drafted in accordance with the ISO/IEC Directives, Part 2.

The committee has decided that the contents of this publication will remain unchanged until the stability date indicated on the IEC web site under "http://webstore.iec.ch" in the data related to the specific publication. At this date, the publication will be

- reconfirmed,
- withdrawn,
- replaced by a revised edition, or
- amended.

EXPRESSION OF PERFORMANCE OF FLUOROMETRIC OXYGEN ANALYZERS IN LIQUID MEDIA

1 Scope

This International Standard is applicable to fluorometric oxygen analyzers used for the continuous determination of dissolved oxygen partial pressure or concentration. It applies to fluorometric oxygen analyzers suitable for use in water containing liquids, ultrapure waters, fresh or potable water, sea water or other aqueous solutions, industrial or municipal waste water from water bodies (e.g. lakes, rivers, estuaries) as well as for industrial process streams and process liquids. Whilst in principle fluorometric oxygen-analyzers are applicable in gaseous phases, the expression of performance in the gas-phase will not be subject of this standard.

The sensor unit of a fluorometric oxygen analyzer being in contact with the media to be measured contains a luminophore in a polymer-membrane permeable for oxygen or within other oxygen permeable materials (or substrates).

This standard specifies the terminology, definitions, requirements for statements by manufacturers and tests for fluorometric oxygen analyzers.

This standard is in accordance with the general principles set out in IEC 60359 and IEC 60770 series.

This standard is applicable to analyzers specified for permanent installation installation in any location (indoors or outdoors) utilizing an on-line measurement technique.

Safety requirements are dealt with in IEC 61010-1.

Standard range of analogue d.c. current signals used in process control systems are dealt with in IEC 60381-1.

Specifications for values for the testing of influence quantities can be found in IEC 60654 series.

Requirements for documentation to be supplied with instruments are dealt with in IEC 61187.

Requirements for general principles concerning quantities, units and symbols are dealt with in ISO 80000-1:2009.

The object of IEC 62703 is:

– to specify the general aspects in the terminology and definitions related to the performance of fluorometric oxygen analyzers used for the continuous determination of dissolved oxygen partial pressure or concentration in liquid media;
– to unify methods used in making and verifying statements on the functional performance of such analyzers;
– to specify which tests should be performed in order to determine the functional performance and how such tests should be carried out;
– to provide basic documents to support the application of standards of quality assurance within ISO 9001.

2 Normative references

The following documents, in whole or in part, are normatively referenced in this document and are indispensable for its application. For dated references, only the edition cited applies. For undated references, the latest edition of the referenced document (including any amendments) applies.

IEC 60068 (all parts), *Environmental testing*

IEC 60359:2001, *Electrical and electronic measurement equipment – Expression of performance*

IEC 61010-1, *Safety requirements for electrical equipment for measurement, control and laboratory use – Part 1: General requirements*

IEC 61187, *Electrical and electronic measuring equipment – Documentation*

koniec náhľadu – text ďalej pokračuje v platenej verzii STN