

STN	Hydrometria Požiadavky na meranie a klasifikácia prístrojov na meranie intenzity zrážok	STN EN 17277 75 1313
------------	--	--

Hydrometry - Measurement requirements and classification of rainfall intensity measuring instruments

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. 03/20

Obsahuje: EN 17277:2019

130407

EUROPEAN STANDARD

EN 17277

NORME EUROPÉENNE

EUROPÄISCHE NORM

October 2019

ICS 07.060

English Version

Hydrometry - Measurement requirements and classification of rainfall intensity measuring instruments

Hydrométrie - Exigences de mesure et classification des instruments de mesure d'intensité pluviométrique

Messung der Regenintensität - Messbedingungen und Klassifizierung für auffangende Regenmesser

This European Standard was approved by CEN on 19 August 2019.

CEN members are bound to comply with the CEN/CENELEC Internal Regulations which stipulate the conditions for giving this European Standard the status of a national standard without any alteration. Up-to-date lists and bibliographical references concerning such national standards may be obtained on application to the CEN-CENELEC Management Centre or to any CEN member.

This European Standard exists in three official versions (English, French, German). A version in any other language made by translation under the responsibility of a CEN member into its own language and notified to the CEN-CENELEC Management Centre has the same status as the official versions.

CEN members are the national standards bodies of Austria, Belgium, Bulgaria, Croatia, Cyprus, Czech Republic, Denmark, Estonia, Finland, France, Germany, Greece, Hungary, Iceland, Ireland, Italy, Latvia, Lithuania, Luxembourg, Malta, Netherlands, Norway, Poland, Portugal, Republic of North Macedonia, Romania, Serbia, Slovakia, Slovenia, Spain, Sweden, Switzerland, Turkey and United Kingdom.



EUROPEAN COMMITTEE FOR STANDARDIZATION
COMITÉ EUROPÉEN DE NORMALISATION
EUROPÄISCHES KOMITEE FÜR NORMUNG

CEN-CENELEC Management Centre: Rue de la Science 23, B-1040 Brussels

Contents		Page
European foreword		3
Introduction		4
1	Scope.....	5
2	Normative references.....	5
3	Terms and definitions.....	5
4	User requirements for RI measurements	8
5	Measurement of RI	8
6	Classification of RI gauges	10
Bibliography		18

European foreword

This document (EN 17277:2019) has been prepared by Technical Committee CEN/TC 318 “Hydrometry”, the Secretary of which is held by BSI.

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 April 2020, and conflicting national standards shall be withdrawn at the latest by April 2020.

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.

This document has been developed from the following:

- CEN/TR 16469:2013 Measurement of the rainfall intensity: requirements, calibration methods and field measurements,
- UNI 11452:2012 Hydrometry - Liquid precipitation intensity: measurements requirements and calibration methods for catching-type gauges
- BS 7843-3:2012 Code of practice for the design and manufacture of storage and automatic collecting rain gauges
- WMO Guide to Meteorological Instruments and Methods of Observation, WMO-n. 8, ed. 2014 (updated 2017). ISBN 978-92-63-10008-5.

According to the CEN-CENELEC Internal Regulations, the national standards organisations of the following countries are bound to implement this European Standard: Austria, Belgium, Bulgaria, Croatia, Cyprus, Czech Republic, Denmark, Estonia, Finland, France, Germany, Greece, Hungary, Iceland, Ireland, Italy, Latvia, Lithuania, Luxembourg, Malta, Netherlands, Norway, Poland, Portugal, Republic of North Macedonia, Romania, Serbia, Slovakia, Slovenia, Spain, Sweden, Switzerland, Turkey and the United Kingdom.

EN 17277:2019 (E)**Introduction**

Precipitation gauges are one of the basic components of world hydro-metrological networks. A requirement for more accurate instruments is crucial for many applications including water resources management, public safety and disaster mitigation.

This standard provides a consistent process for classification of catching type rainfall intensity gauges in laboratory conditions.

This standard will allow users to buy and use a rainfall intensity gauge knowing that it will perform to a specific class of performance before it is deployed to the field.

1 Scope

This document considers liquid atmospheric precipitation and defines the procedures and equipment to perform laboratory and field tests, in steady-state conditions, for the calibration, check and metrological confirmation of liquid precipitation measurement instruments. It provides a classification of catching-type measurement instruments based on their laboratory performance. The classification does not relate to the physical principle used for the measurement, nor does it refer to the technical characteristics of the instrument assembly, but is solely based on the instrument calibration. Attribution of a given class to an instrument is not intended as a high/low ranking of its quality but rather as a quantitative standardized method to declare the achievable measurement accuracy in order to provide guidance on the suitability for a particular purpose, while meeting the user's requirements.

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.

EN ISO 10012:2003, *Measurement management systems - Requirements for measurement processes and measuring equipment ISO 10012:2003*)

koniec náhľadu – text ďalej pokračuje v platenej verzii STN