

PROFORMA FOR ADOPTION OF DRAFT INDIAN STANDARD

BUREAU OF INDIAN STANDARDS

Subject: Approval of Draft Indian Standard

Sl. No.	Doc. No.	IS No.	TITLE
1	WRD/01/20347	IS 14973 : 2024 ISO 3966 : 2020	Measurement of Fluid Flow in Closed Conduits — Velocity Area Method Using Pitot Static Tube (<i>Second Revision</i>)
2	WRD/01/22080	IS 14615 (Part 2) : 2024 ISO 5167-2 : 2022	Measurement of Fluid Flow by Means of Pressure Differential Devices Inserted in Circular Cross Section Conduits Running Full Part 2 Orifice Plates (<i>First Revision</i>)
3	WRD/01/22063	IS 14615 (Part 1) : 2024 ISO 5167-1 : 2022	Measurement of Fluid Flow by Means of Pressure Differential Devices Inserted in Circular Cross Section Conduits Running Part 1 General Principles and Requirements (<i>Second Revision</i>)

In accordance with Part II, sub-rule (2) of rule 22 of BIS Rules 2018, I enclose a copy of the draft Indian Standard mentioned above finalized by the Sectional Committee WRD 01 and its Chairperson, in the light of comments received from important stake holders.


It is requested that this note and its enclosures may be returned to this office as early as possible recording your approval of the above draft Indian Standard.

Encl.: As above.


Dushyant Prajapati
Scientist E/ Director and Head
(Water Resources Department)
वैज्ञानिक 'ई' / निदेशक एवं प्रमुख (जल संसाधन विभाग)
Sc. 'E' / Director & Head (Water Resources Deptt.)
भारतीय मानक ब्यूरो
BUREAU OF INDIAN STANDARDS
उपभोक्ता मामले, खाद्य एवं सार्वजनिक वितरण मंत्रालय
Ministry of Consumer Affairs, Food & Public Distribution
भारत सरकार / Government of India
9, बहादुरशाह जफर मार्ग, नई दिल्ली-110002
9, Bahadur Shah Zafar Marg, New Delhi-110002

Chairperson, Water Resources Division Council
BIS U.O. No. WRD 01/T-40, T-87 and T-37
Dated:

APPROVED


(Chairperson)
Water Resources Division Council
राकेश कुमार वर्मा / Rakesh Kumar Verma
अध्यक्ष / Chairman
केन्द्रीय जल आयोग / Central Water Commission
जल शक्ति मंत्रालय / Ministry of Jal Shakti
जल संसाधन, नदी विकास और नंगा संरक्षण विभाग
Deptt. of Water Resources, RD & GR
भारत सरकार / Govt. of India
नई दिल्ली / New Delhi

भारतीय मानक
Indian Standard

IS 14615 (Part 1) : 2024
ISO 5167-1 : 2022

पूर्ण भरे बहाव वाली वृत्ताकार अनुप्रस्थ काट
की वाहिकाओं में विभेदक दबाव उपकरणों
के माध्यम से द्रव प्रवाह मापन

भाग 1 सिद्धांत एवं अपेक्षाएं
(दूसरा पुनरीक्षण)

**Measurement of Fluid Flow by Means
of Pressure Differential Devices
Inserted in Circular Cross Section
Conduits Running**

**Part 1 General Principles and
Requirements**
(*Second Revision*)

ICS 17.120.10

© BIS 2024
© ISO 2022



भारतीय मानक ब्यूरो
BUREAU OF INDIAN STANDARDS
मानक भवन, 9 बहादुर शाह ज़फर मार्ग, नई दिल्ली - 110002
MANAK BHAVAN, 9 BAHADUR SHAH ZAFAR MARG
NEW DELHI - 110002
www.bis.gov.in www.standardsbis.in

October 2024

Price Group 14

NATIONAL FOREWORD

This standard (Part 1) (Second Revision) which is identical to ISO 5167-1 : 2022 'Measurement of fluid flow by means of pressure differential devices inserted in circular cross-section conduits running full — Part 1: General principles and requirements (Second Revision)' issued by the International Organization for Standardization (ISO). This standard was adopted by the Bureau of Indian Standards on the recommendation of the Hydrometry Sectional Committee and was approved by the Water Resources Division Council.

This standard was first published in 1999, based on ISO 5167-1 : 1991. The first revision was brought out in 2018 to align it with the then latest version of ISO 5167-1 : 2003. This second revision has been undertaken to align it with the latest version of ISO 5167-1 : 2022.

This standard is published in five parts. Other parts in this series are:

Part 2 Orifice plates

Part 3 Nozzle and venturi nozzles

Part 4 Venturi tubes

Part 5 Cone meters

The text of ISO standard has been approved as suitable for publication as an Indian Standard without deviations. Certain conventions are, however, not identical to those used in Indian Standards. Attention is particularly drawn to the following:

- a) Wherever the words 'International Standard' appear referring to this standard, they should be read as 'Indian Standard'; and
- b) Comma (,) has been used as a decimal marker, while in Indian Standards, the current practice is to use a point (.) as the decimal marker.

In this adopted standard, reference to certain International Standards appears for which Indian Standards also exist. The corresponding Indian Standards, which are to be substituted in their respective places, are listed below along with their degree of equivalence for the editions indicated:

<i>International Standard</i>	<i>Corresponding Indian Standard</i>	<i>Degree of Equivalence</i>
ISO 5167-2 Measurement of fluid flow by means of pressure differential devices inserted in circular cross-section conduits running full — Part 2: Orifice plates	IS 14615 (Part 2) : 2018/ISO 5167-2 : 2003 Measurement of fluid flow by means of pressure differential devices inserted in circular cross section conduits running full: Part 2 Orifice plates	Identical
ISO 5167-3 Measurement of fluid flow by means of pressure differential devices inserted in circular cross-section conduits running full — Part 3: Nozzles and venturi nozzles	IS 14615 (Part 3) : 2024/ISO 5167-3 : 2022 Measurement of fluid flow by means of pressure differential devices inserted in circular cross section conduits running full: Part 3 Nozzles and venturi nozzles	Identical
ISO 5167-4 Measurement of fluid flow by means of pressure differential devices inserted in circular cross-section conduits running full — Part 4: Venturi tubes	IS 14615 (Part 4) : 2018/ISO 5167-4 : 2003 Measurement of fluid flow by means of pressure differential devices inserted in circular cross section conduits running full: Part 4 Venturi tubes	Identical

(Continued on third cover)

(Continued from second cover)

<i>International Standard</i>	<i>Corresponding Indian Standard</i>	<i>Degree of Equivalence</i>
ISO 5168 : 2005 Measurement of fluid flow — Procedures for the evaluation of uncertainties	IS 17288 : 2021 Measurement of Fluid flow — Procedures for evaluation of uncertainties	Identical

The Committee responsible for the preparation of this standard has reviewed the provisions of the following ISO/IEC standard and has decided that they are acceptable for use in conjunction with this standard:

<i>International Standard</i>	<i>Title</i>
ISO 4006 : 1991	Measurement of fluid flow in closed conduits — Vocabulary and symbols
ISO/IEC Guide 98-3	Uncertainty of measurement — Part 3: Guide to the expression of uncertainty in measurement (GUM : 1995)

For the purpose of determining whether a particular requirement of this standard is complied with the final value, observed or calculated expressing the result of a test or analysis shall be rounded off in accordance with IS 2 : 2022 'Rules for rounding off numerical values (*second revision*)'. The number of significant places retained in the rounded off value should be the same as that of the specified value in this standard.