AS 2360.1.5—2001
ISO/TR 3313:1998

Australian Standard™

Measurement of fluid flow in closed conduits

Part 1.5: Pressure differential methods—Measurement using orifice plates, nozzles or Venturi tubes—Pulsating flow, in particular sinusoidal or square wave intermittent periodic-type fluctuations

[ISO title: Measurement of fluid flow in closed conduits—Guidelines on the effects of flow pulsations on flow-measurement instruments]

Standards Australia

This Australian Standard was prepared by Committee CE-024, Measurement of Water Flow in Open Channels and Closed Conduits. It was approved on behalf of the Council of Standards Australia on 25 September 2000 and published on 12 March 2001.

The following interests are represented on Committee CE-024:

Australian Water and Wastewater Association

Department of Natural Resources, Qld

Institute of Instrumentation and Control Australia

Department of Land and Water Conservation, New South Wales

Department of Public Works and Services, New South Wales

South Australian Water Corporation

Sydney Water Corporation

University of New South Wales

University of Adelaide

University of Technology, Sydney

Keeping Standards up-to-date

Standards are living documents which reflect progress in science, technology and systems. To maintain their currency, all Standards are periodically reviewed, and new editions are published. Between editions, amendments may be issued. Standards may also be withdrawn. It is important that readers assure themselves they are using a current Standard, which should include any amendments which may have been published since the Standard was purchased.

Detailed information about Standards can be found by visiting the Standards Australia web site at www.standards.com.au and looking up the relevant Standard in the on-line catalogue.

Alternatively, the printed Catalogue provides information current at 1 January each year, and the monthly magazine, *The Australian Standard*, has a full listing of revisions and amendments published each month.

We also welcome suggestions for improvement in our Standards, and especially encourage readers to notify us immediately of any apparent inaccuracies or ambiguities. Contact us via email at mail@standards.com.au, or write to the Chief Executive, Standards Australia International Ltd, GPO Box 5420, Sydney, NSW 2001.

This Standard was issued in draft form for comment as DR 99534.

Australian Standard™

Measurement of fluid flow in closed conduits

Part 1.5: Pressure differential methods—Measurement using orifice plates, nozzles or Venturi tubes—Pulsating flow, in particular sinusoidal or square wave intermittent periodic-type fluctuations

Originated as AS 2360.1.5—1993.
Second edition 2001.

Published by Standards Australia International Ltd
GPO Box 5420, Sydney, NSW 2001, Australia

ISBN 0 7337 3663 7

PREFACE

This Standard was prepared by the Standards Australia Committee CE-024, Measurement of Water Flow in Open Channels and Closed Conduits.

This Standard is identical to and is reproduced from ISO/TR 3313:1998:, *Measurement of fluid flow in closed conduits—Guidelines on the effects of flow pulsations on flow-measurement instruments*.

This Standard is Part 1.5 of AS 2360, *Measurement of fluid flow in closed conduits*, which is published in parts as follows:

AS		
2360.0	Part 0:	Vocabulary and symbols
2360.1.1	Part 1.1:	Pressure differential methods—Measurement using orifice plates, nozzles or Venturi tubes—Conduits with diameters from 50 mm to 1200 mm
2360.1.2	Part 1.2:	Pressure differential methods—Measurement using orifice plates or nozzles—Conduits with diameters less than 50 mm
2360.1.3	Part 1.3:	Pressure differential methods—Measurement using orifice plates, nozzles or Venturi tubes—Guide to the use of methods specified in Parts 1.1 and 1.2
2360.1.4	Part 1.4:	Pressure differential methods—Measurement using orifice plates, nozzles or Venturi tubes—Guide to the effect of departure from the conditions specified in Part 1.1
2360.1.5	Part 1.5:	Pressure differential methods—Measurement using orifice plates, nozzles or Venturi tubes—Pulsating flow, in particular sinusoidal or square wave intermittent periodic-type fluctuations (this Standard)
2360.6.1	Part 6.1:	Volumetric methods—By mass
2360.6.2	Part 6.2:	Volumetric methods—By volume
2360.7.1	Part 7.1:	Assessment of uncertainty in the calibration and use of flow measurement devices—Linear calibration relationships
2360.7.2	Part 7.2:	Assessment of uncertainty in the calibration and use of flow measurement devices—Non-linear calibration relationships

Under arrangements made between Standards Australia and the international Standards bodies, ISO and IEC, as well as certain other Standards organizations, users of this Australian Standard are advised of the following:

(a) Copyright is vested in Standards Australia.

(b) The number of this Standard is not reproduced on each page, its identity is shown only on the cover and title page.

(c) In the source text ‘this International Standard’ should read ‘this Australian Standard’.

(d) A full point should be substituted for a comma when referring to a decimal marker.

(e) References to International Standards should be replaced by references to equivalent Australian Standards as follows:

Reference to International Standard		*Australian or Australian/New Zealand Standard*	
ISO		AS	
5167-1	Measurement of fluid flow by means of pressure differential devices—Part 1: Orifice plates, nozzles and Venturi tubes inserted in circular cross-section conduits running full.	2360	Measurement of fluid flow in closed conduits
		2360.1.1	Pressure differential methods—Measurement using orifice plates, nozzles or Venturi tubes—Conduits with diameters from 50 mm to 1200 mm.

CONTENTS

Page