

Valves primarily for use in heated water systems

Part 1: Protection valves



This Australian Standard® was prepared by Committee WS-026, Valves Primarily for Use in Warm and Hot Water Systems. It was approved on behalf of the Council of Standards Australia on 22 September 2008.

This Standard was published on 28 January 2009.

The following are represented on Committee WS-026:

- Australian Chamber of Commerce and Industry
- Australian Industry Group
- Building Officials Institute of New Zealand
- Consumers Federation of Australia
- Department of Health (South Australia)
- Gas Appliance Manufacturers Association of Australia
- Institute of Hospital Engineering Australia
- Master Plumbers and Mechanical Services Association of Australia
- Master Plumbers Association of NSW
- Master Plumbers, Gasfitters and Drainlayers New Zealand
- New Zealand Employers and Manufacturers Association
- New Zealand Engineers Federation
- NSW Health Department
- Plumbing Product Industry Group (AUSTAP)
- Water Corporation Western Australia

This Standard was issued in draft form for comment as DR 07139.

Standards Australia wishes to acknowledge the participation of the expert individuals that contributed to the development of this Standard through their representation on the Committee and through the public comment period.

Keeping Standards up-to-date

Australian Standards® are living documents that 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Standards may also be withdrawn.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 that may have been published since the Standard was published.

Detailed information about Australian Standards, drafts, amendments and new projects can be found by visiting www.standards.org.au

Standards Australia welcomes suggestions for improvements, and encourages readers to notify us immediately of any apparent inaccuracies or ambiguities. Contact us via email at mail@standards.org.au, or write to Standards Australia, GPO Box 476, Sydney, NSW 2001.

AS 1357.1—2009 (Incorporating Amendment No. 1)

Australian Standard®

Valves primarily for use in heated water systems

Part 1: Protection valves

Originated as AS B271—1968. AS B271—1968 revised and redesignated AS 1357—1972. AS 1357—1972 revised and redesignated in part AS 1357.1—1988. Fourth edition 2009. Reissued incorporating Amendment No. 1 (April 2016).

COPYRIGHT

© Standards Australia Limited

All rights are reserved. No part of this work may be reproduced or copied in any form or by any means, electronic or mechanical, including photocopying, without the written permission of the publisher, unless otherwise permitted under the Copyright Act 1968.

Published by SAI Global Limited under licence from Standards Australia Limited, GPO Box 476, Sydney, NSW 2001, Australia

ISBN 0 7337 8995 1

Α1

PREFACE

This Standard was prepared by the Australian members of the Joint Standards Australia/Standards New Zealand Committee WS-026, Valves Primarily for Use in Warm and Hot Water Systems, to supersede AS 1357.1—2004, Water supply—Valves for use with unvented water heaters, Part 1: Protection valves, and ATS 5200.476—2006, Technical Specification for plumbing and drainage products, Part 476: Heated water systems—Leak protection device.

After consultation with stakeholders in both countries, Standards Australia and Standards New Zealand decided to develop this Standard as an Australian Standard rather than an Australian/New Zealand Standard.

This Standard incorporates Amendment No. 1 (April 2016). The changes required by the Amendment are indicated in the text by a marginal bar and amendment number against the clause, note, table, figure or part thereof affected.

The objective of this Standard is to provide manufacturers with design, materials and performance requirements for the protection of valves.

Other Standards covering heated water system valves include the following:

AS 1357 1357.2	Valves primarily for use in heated water systems Part 2: Control valves
4032	Water supply—Valves for the control of heated water supply temperatures
4032.1	Part 1: Thermostatic mixing valves—Materials design and performance requirements
4032.2	Part 2: Tempering valves and end-of-line temperature actuated devices
4032.3	Part 3: Requirements for field testing, maintenance or replacement of thermostatic mixing valves, tempering valves and end of line temperature control devices
4032.4	Part 4: Thermostatically controlled taps for the control of heated water supply temperatures

The terms 'normative' and 'informative' have been used in this Standard to define the application of the appendix to which they apply. A 'normative' appendix is an integral part of a Standard, whereas an 'informative' appendix is only for information and guidance.

Statements expressed in mandatory terms in notes to tables and figures are deemed to be requirements of this Standard.

CONTENTS

	P	Page
SECTIO	N 1 SCOPE AND GENERAL	
1.1	SCOPE	6
1.2	APPLICATION	
1.3	NORMATIVE REFERENCES	
1.4	DEFINITIONS	
1.4	INSTRUMENTATION	
1.6	MARKING	
1.0	WAKKING	0
SECTIO	N 2 MATERIALS	
2.1	GENERAL	9
2.2	CONTAMINATION OF WATER	
2.3	CORROSION-RESISTANT METALLIC MATERIALS	9
2.4	COPPER	9
2.5	COPPER ALLOY	
2.6	DEZINCIFICATION-RESISTANT (DR) COPPER ALLOY	
2.7	STAINLESS STEEL	
2.8	DIAPHRAGM MATERIALS, AND VALVE SEATS	
2.9	TEMPERATURE-SENSING PROBE	
	OTHER COMPONENTS	
,,		
SECTIO	N 3 GENERAL DESIGN AND CONSTRUCTION	
3.1	GENERAL	. 12
3.2	STRENGTH	. 12
3.3	END CONNECTIONS	12
3.4	COMPONENTS AND VALVE SEATS	12
3.5	REMANUFACTURED VALVES	12
3.6	INSULATION OF TEMPERATURE/PRESSURE-RELIEF VALVES,	
	TEMPERATURE-RELIEF VALVES, EXPANSION CONTROL VALVES AND	
	COMBINATION HIGH-PRESSURE EXPANSION NON-RETURN VALVES	13
3.7	INSTALLATION INSTRUCTIONS	. 14
SECTIO	N 4 TEMPERATURE/PRESSURE-RELIEF VALVES	
4.1	GENERAL	
4.2	INLET AND DRAIN CONNECTIONS AND FLOW DIMENSIONS	15
4.3	VALVE SEAT AND DISC ASSEMBLIES	17
4.4	SPRINGS PRESSURE-RELIEF FUNCTION	17
4.5	TESTING	. 17
4.6	EASING GEAR TEST	20
4.7	AUXILIARY PRESSURE-RELIEF DEVICE	21
4.8	PRESSURE-RELIEF FUNCTION	21
4.9	TEMPERATURE-RELIEF FUNCTION	
4.10	MARKING	. 23



	This is a free preview.	Purchase the e	entire publication	at the link below:
--	-------------------------	----------------	--------------------	--------------------

Product Page

- Dooking for additional Standards? Visit Intertek Inform Infostore
- Dearn about LexConnect, All Jurisdictions, Standards referenced in Australian legislation