

Australian Standard[®]

**In-line ball valves for use in plumbing
water supply systems**

Part 1: Metal-bodied



This Australian Standard® was prepared by Committee WS-022, Valves for Waterworks Purposes. It was approved on behalf of the Council of Standards Australia on 3 February 2012.

This Standard was published on 6 March 2012.

The following are represented on Committee WS-022:

- Australian Chamber of Commerce and Industry
 - Australian Industry Group
 - Australian Stainless Steel Development Association
 - Australian Water Association
 - Engineers Australia
 - Institute of Instrumentation, Control and Automation Australia
 - Master Plumbers Australia
 - Plastics Industry Pipe Association of Australia
 - Plumbing Products Industry Group
 - Water Corporation Western Australia
 - Water Industry Alliance
 - Water New Zealand
 - Water Services Association of Australia
-

This Standard was issued in draft form for comment as DR AS 5830.1.

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Standards may also be withdrawn.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.

Australian Standard[®]

**In-line ball valves for use in plumbing
water supply systems**

Part 1: Metal-bodied

Originated as ATS 5200.012—2005.
Revised and redesignated as AS 5830.1—2012.

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 978 1 74342 048 5

PREFACE

This Standard was prepared by the Joint Standards Australia/Standards New Zealand Committee WS-022, Valves for Waterworks Purposes, to supersede in part ATS 5200.012—2005, *Technical Specification for plumbing and drainage products Part 012: In-line valves for use in plumbing water supply systems—Miscellaneous types metallic and non-metallic*.

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.

The objective of this Standard is to provide suitable materials and performance tests for metal-bodied ball valves used in plumbing water supply systems together with compliance requirements for the use of manufacturers and conformity assessment bodies.

Many of the requirements within this Standard are taken from AS 4617, *Manual shut off gas valves*, due to safety and performance requirements being applicable to this Standard.

While it was recognized that three-piece ball valves are manufactured for a range of industrial applications, it was decided that, for the purposes of plumbing water supply systems, three-piece ball valves would not be addressed until it could be demonstrated that such valves were appropriate for plumbing water supply systems and there were relevant fully documented design, manufacturing, performance and testing requirements available.

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.

CONTENTS

	<i>Page</i>
SECTION 1 SCOPE AND GENERAL	
1.1 SCOPE.....	4
1.2 DEMONSTRATION OF COMPLIANCE	4
1.3 NORMATIVE REFERENCES	4
1.4 DEFINITIONS.....	5
1.5 DESIGNATION OF SIZE	6
1.6 ALLOWABLE PRESSURES	6
SECTION 2 MATERIALS AND COMPONENTS	
2.1 GENERAL.....	7
2.2 METALLIC MATERIALS	7
2.3 PLASTICS MATERIALS.....	8
2.4 EFFECT ON WATER	8
SECTION 3 DESIGN	
3.1 GENERAL.....	9
3.2 NOMINAL SIZE RELATIONSHIP	9
3.3 END CONNECTIONS	9
3.4 OPERATING MECHANISM	10
3.5 FINISH AND WORKMANSHIP.....	10
SECTION 4 TESTING	
4.1 TYPE TESTS.....	11
4.2 PRODUCTION TESTS	13
SECTION 5 MARKING AND DOCUMENTATION	
5.1 MARKING	15
5.2 PRODUCT DOCUMENTATION—INSTALLATION INSTRUCTIONS.....	15
APPENDICES	
A MEANS FOR DEMONSTRATING COMPLIANCE WITH THIS STANDARD	16
B PURCHASING GUIDELINES	18
C TEST METHOD FOR DEMONSTRATING COMPLIANCE WITH OPERATING EFFORT REQUIREMENTS	19
D RESISTANCE TO TORQUE TEST	21
E BENDING TEST	23
F TORQUE TEST FOR OPERATING MECHANISM.....	24
G RESISTANCE TO IMPACT TEST	26
H ENDURANCE TEST.....	28
BIBLIOGRAPHY.....	30

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

AS 5830.1 : 2012 : EN PDF

-
- ⊙ Looking for additional Standards? Visit SAI Global Infostore
 - ⊙ Learn about LexConnect, All Jurisdictions, Standards referenced in Australian legislation
-

Need to speak with a Customer Service Representative - Contact Us