

Australian Standard™

**Knife-gate valves for waterworks
purposes**

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 January 2003 and published on 3 March 2003.

The following are represented on Committee WS-022:

Australian Chamber of Commerce and Industry
Australian Industry Group
Australian Valve Manufacturers Association
Business New Zealand
Master Plumbers Australia
New Zealand Metal Casting Industry Association
Plastics Industry Pipe Association of Australia
Water Industry Alliance
Water Services Association of Australia

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PREFACE

This Standard was prepared by the Joints Standards Australia/Standards New Zealand Committee WS-022, Valves for Water Supply Purposes, in response to a request from Water Services Association of Australia (WSAA) to provide a suitable product Standard for knife-gate valves.

The objective of this Standard is to provide material requirements and performance tests for knife-gate valves in water supply systems including potable water, recycled water and screened wastewater systems, together with default compliance requirements for the use of manufacturers and certification bodies.

Support and contribution is acknowledged from the Water Services Association of Australia (WSAA) and manufacturers.

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.

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STANDARDS AUSTRALIA

Australian Standard
Knife-gate valves for waterworks purposes

SECTION 1 SCOPE AND GENERAL

1.1 SCOPE

This Standard specifies requirements for Class 10 flanged, wafer and lugged, rising and non-rising spindle, uni-directional and bi-directional, gland box and bonneted knife-gate valves of sizes DN 50 to DN 1500 inclusive for:

- (a) cold potable water supply (up to 40°C); and
- (b) drainage and sewerage systems (continuous flow up to 45°C and intermittent flow up to 95°C).

The valves are designed for operation by manual hand wheel either above ground or buried or submerged with an extension spindle.

Means for demonstrating compliance with this Standard are given in Appendix A.

NOTES:

- 1 Purchasing guidelines are given in Appendix B.
- 2 The design of the extension spindle is not covered in this Standard.

1.2 REFERENCED DOCUMENTS

The documents referred to in this Standard are listed in Appendix C.

1.3 DEFINITIONS

For the purpose of this Standard, the definitions below apply.

1.3.1 Knife-gate valve

A valve that provides on/off control by means of a thin, parallel sliding gate and guide.

1.3.2 Allowable operating pressure

The allowable internal pressure, excluding surge, that a component can safely withstand in service.

1.3.3 Maximum allowable operating pressure

The allowable internal pressure, including surge, that a component can safely withstand in service.

1.3.4 Allowable test pressure

The maximum internal hydrostatic pressure that can be applied on site to a component in a newly installed pipeline.

1.3.5 Bi-directional

The valve is designed to seal against the flow in either direction.