

Australian/New Zealand Standard™

**Fittings for polyethylene (PE) pipes for  
pressure applications**



## **AS/NZS 4129:2000**

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This Joint Australian/New Zealand Standard was prepared by Joint Technical Committee PL-006, Polyolefin Pipe Systems. It was approved on behalf of the Council of Standards Australia on 21 January 2000 and on behalf of the Council of Standards New Zealand on 22 February 2000.

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The following are represented on Committee PL-006:

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AUSTAP  
Australian Association of Certification Bodies  
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Australian Gas Association  
CSIRO Building, Construction and Engineering  
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# Australian/New Zealand Standard™

## Fittings for polyethylene (PE) pipes for pressure applications

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## PREFACE

This Standard was prepared by the Joint Standards Australia/Standards New Zealand Committees PL/6, Polyolefin Pipe Systems.

*This Standard incorporates Amendment No. 1 (December 2001), Amendment No. 2 (November 2002) and Amendment 3 (November 2005). The changes required by the Amendments are indicated in the text by a marginal bar and amendment number against the clause, note, table, figure or part thereof affected.*

The fittings covered in this Standard are for use with polyethylene (PE) pipe specified in AS/NZS 4130, *Polyethylene (PE) pipes for pressure applications* and AS 2698.2, *Plastics pipes and fittings for irrigation and rural applications, Part 2: Polyethylene rural pipe*. AS 1460—1989, *Fittings for use with polyethylene pipes, Part 1: Mechanical jointing fittings*, and Part 2: *Electrofusion fittings*, are withdrawn.

This Standard follows the classification structure for pipes adopted by ISO (Renard 10 Series) excepting for Class Rural Mechanical Compression fittings.

This Standard is structured into the following four Sections:

- Section 1 General requirements and test methods
- Section 2 Mechanical compression joint fittings
- Section 3 Electrofusion fittings
- Section 4 Mechanical tapping saddles

Section 1 has adopted ISO test methods where possible. Sections 1 and 2 are largely based on ISO 14236, *Mechanical joint compression fittings for use with polyethylene pressure pipes in water supply systems*.

Section 3 is based largely on pr EN 12201-3, *Plastics piping system for water supply—Polyethylene (PE) Part 3: Fittings, performance criteria and test methods*.

Section 4 is based on ISO 13460, *Agricultural irrigation equipment—Plastics saddles for polyethylene pressure pipes*, with alterations making it applicable to all PE pressure ratings and to include metal tapping saddles.

The term ‘normative’ has been used in this Standard to define the application of the appendix to which it applies. A ‘normative’ appendix is an integral part of a Standard.

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## STANDARDS AUSTRALIA/STANDARDS NEW ZEALAND

**Australian/New Zealand Standard****Fittings for polyethylene (PE) pipes for pressure applications**

## SECTION 1 GENERAL REQUIREMENTS AND TEST METHODS

**1.1 SCOPE**

This Standard specifies requirements for fittings to be used with polyethylene pipe manufactured in accordance with AS/NZS 4130 or AS 2698.2. This Standard is applicable to fittings manufactured for the conveyance of water, gaseous fuels, and other fluids including compressed air. For continuous use at temperatures above 40°C refer to the manufacturer.

The requirements of Section 1 apply to fittings manufactured to comply with all Sections of the Standard except where subsequent sections detail or exempt specific requirements.

Installation requirements are included in AS 2033, AS 3723 and AS 4041 as appropriate.

Methods of demonstrating compliance with this Standard are given in Appendix A.

**1.2 REFERENCED DOCUMENTS**

The following documents are referred to in this Standard.

## AS

1199	Sampling procedures and tables for inspection by attributes
1722	Pipe threads of Whitworth form
1722.1	Part 1: Sealing pipe threads
1722.2	Part 2: Fastening pipe threads
2033	Installation of polyethylene pipe systems
2345	Dezincification resistance of copper alloys
2698	Plastics pipes and fittings for irrigation and rural applications
2698.2	Part 2: Polyethylene rural pipe
3688	Water supply—Copper and copper alloy body compression and capillary fittings and threaded-end connectors
3707	Method for testing pressure cycling resistance of pipes and fittings
3723	Installation and maintenance of plastics pipe systems for gas
3855	Suitability of plumbing and water distribution system products for contact with potable water
4041	Pressure piping

## AS/NZS

1462	Methods of test for plastics pipes and fittings
1462.8	Method 8: Method of test for liquid infiltration
3500	National Plumbing and Drainage Code
3500.0	Part 0: Glossary of terms