

Australian/New Zealand Standard™

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



AS/NZS 4129:2020

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 10 February 2020 and by the New Zealand Standards Approval Board on 18 December 2019.

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- Australian Building Codes Board
- Australian Industry Group
- Energy Networks Australia
- Engineers Australia
- Plastics Industry Pipe Association of Australia
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**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 Committee PL-006, Polyolefin Pipe Systems, to supersede AS/NZS 4129:2008.

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*, and PIPA POP 009, *Industry Guidelines — Polyethylene rural and flood pipe*.

This Standard follows the classification structure for pipes adopted by ISO (Renard 10 and 20 Series) excepting for Class Rural Mechanical Compression fittings.

This revision incorporates general updates to references and size range tables and includes new requirements for flanges, fabricated fittings and mechanical fittings. The revision also includes updates to align more closely with recent publications of related ISO and EN Standards.

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The terms “normative” and “informative” are used in Standards 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.

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# Australian/New Zealand Standard

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

### Section 1 Scope and general

#### 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 or POP 009. This Standard is applicable to fittings manufactured for the conveyance of water, fuel gas, and other fluids including compressed air.

NOTE For continuous use at temperatures above 20 °C refer to AS/NZS 2033 for polyethylene materials.

[Section 1](#) specifies general requirements that apply to all fittings except where subsequent sections detail or exempt specific requirements for particular types of fittings.

This Standard is not applicable to fittings that achieve end-load restraint by processes that reduce pipe and/or fitting spigot thickness to  $< 0.9 T_{\min}$  as defined by AS/NZS 4130.

Requirements for demonstrating conformity to this Standard are specified in [Appendix A](#).

#### 1.2 Normative references

The following documents are referred to in the text in such a way that some or all of their content constitutes requirements of this document.

NOTE Documents referenced for informative purposes are listed in the Bibliography.

AS 1049, *Telecommunication cables — Insulation, sheath and jacket*

AS 1145.2, *Determination of tensile properties of plastics materials, Part 2: Test conditions for moulding and extrusion plastics*

AS 1199.1, *Sampling procedures for inspection by attributes, Part 1: Sampling schemes indexed by acceptance quality limit (AQL) for lot-by-lot inspection*

AS 1722.2, *Pipe threads of Whitworth form, Part 2: Fastening pipe threads*

AS 2129, *Flanges for pipes, valves and fittings*

AS 2193, *Calibration and classification of force-measuring systems*

AS 2345, *Dezincification resistance of copper alloys*

AS 2698.2, *Plastic pipes and fittings for irrigation and rural applications, Part 2: Polyethylene rural pipe*

AS 3688, *Water supply — Metallic fittings and end connectors*

AS ISO 7, *Pipe threads where pressure-tight joints are made on the threads — Dimensions, tolerances and designation*

AS/NZS 2280, *Ductile iron pipes and fittings*

AS/NZS 3500.0, *Plumbing and drainage, Part 0: Glossary of terms*

AS/NZS 4020, *Products for use in contact with drinking water*

AS/NZS 4087, *Metallic flanges for waterworks purposes*

AS/NZS 4130, *Polyethylene (PE) pipes for pressure applications*

AS/NZS 4131, *Polyethylene (PE) compounds for pressure pipes and fittings*