

Australian/New Zealand Standard™

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



AS/NZS 4129:2008

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 27 May 2008 and on behalf of the Council of Standards New Zealand on 26 May 2008.

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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 Committees PL/6, Polyolefin Pipe Systems, to supersede AS/NZS 4129:2000.

This Standard incorporates Amendment No. 1 (December 2013). 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 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 Standard is structured into the following Sections:

Section 1 General requirements and test methods

Section 2 Mechanical compression joint fittings

Section 3 Electrofusion fittings

Section 4 Mechanical tapping saddles

Section 5 Post-formed bends

Section 6 Spigot fittings for butt fusion, for socket fusion using heated tools and for use with electrofusion fittings

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

Section 3 is based largely on ISO 8085-3, *Polyethylene fittings for use with polyethylene pipes for the supply of gaseous fuels—Metric series—Specifications, Part 3: Electrofusion fittings*.

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.

Section 6 is based on ISO 8085-2, *Polyethylene fittings for use with polyethylene pipes for the supply of gaseous fuels—Metric series—Specifications, Part 2: Spigot fittings for butt fusion, for socket fusion using heated tools and for use with electrofusion fittings*.

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.

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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 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.

1.2 APPLICATION

Means for demonstrating compliance with this Standard shall be in accordance with Appendix A.

1.3 NORMATIVE REFERENCES

The following documents are indispensable to the application of this Standard.

AS

1049	Telecommunication cables—Insulation, sheath and jacket
1145	Determination of tensile properties of plastics materials
1145.2	Part 2: Test conditions for moulding and extrusion plastics
1199	Sampling procedures for inspection by attributes
1191.1	Part 1: Sampling schemes indexed by acceptance quality limit (AQL) for lot-by-lot inspection
1722	Pipe threads of Whitworth form
1722.2	Part 2: Fastening pipe threads
2129	Flanges for pipes, valves and fittings
2193	Calibration and classification of force-measuring 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—Metallic fittings and end connectors
7.1	Pipe threads where pressure-tight joints are made on the threads—Dimensions, tolerances and designation
9624	Polyethylene (PE) pipes for fluids under pressure—Mating dimensions of flange adaptors and loose backing flanges (ISO 9624:1997, MOD)