## Australian Standard®

Polyethylene (PE) pipes for fluids under pressure—Mating dimensions of flange adapters and loose backing flanges (ISO 9624:1997, MOD)



This Australian Standard® was prepared by Committee PL-006, Polyolefin Pipe Systems. It
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- CSIRO Manufacturing and Materials Technology
- Certification Interests (Australia)
- Energy Networks Association
- Engineers Australia
- Master Plumbers, Gasfitters and Drainlayers New Zealand
- New Zealand Water and Waste Association
- Plastics Industry Pipe Association of Australia
- Plastics New Zealand
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#### **PREFACE**

This Standard was prepared by the Joint Standards Australia/Standards New Zealand Committee PL-006, Polyolefin Pipe Systems. 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.

This Standard is an adoption with national modifications and has been reproduced from ISO 9624:1997 Thermoplastics pipes for fluids under pressure—Mating dimensions of flange adapters and loose backing flanges. The modifications have been made to limit the scope of the Standard to polyethylene (PE) pipe systems.

The objective of this Standard is to specify the mating dimensions of flange adaptors of polyethylene (PE) materials and the corresponding dimensions of loose backing flanges to be used with polyethylene (PE) pipes under pressure.

As this Standard is reproduced from an international Standard, the following applies:

- (a) Its number does not appear on each page of text and its identity is shown only on the cover and title page.
- (b) In the source text 'this International Standard' should read 'this Australian Standard'.
- (c) A full point substitutes for a comma when referring to a decimal marker.

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

References to International Standards should be replaced by references to Australian or Australian/New Zealand Standards, as follows:

Reference to International Standard		Australian/New Zealand Standard
ISO		AS
161	Thermoplastic pipes for the conveyance of fluids—Nominal outside diameters and nominal pressures	_
161-1	Part 1: Metric series	
261	ISO general purpose metric screw threads—General plan	_
273	Fasteners—Clearance holes for bolts and screws	_
727	Fittings of uplasticized polyvinyl chloride (PVC-U), chlorinated polyvinyl chloride (PVC-C) or acrylonitrile/butadiene/styrene (ABS) with plain sockets for pipes under pressure—Sockets for fusion using heated tools—Metric series	

ISO		AS/NZS		
7005	Metallic flanges	4331	Metallic flanges	
	Part 1: Steel flanges	4331.1	Part 1: Steel flanges	
7279	Polypropylene (PP) fittings for pipes under pressure—Sockets for fusion using heated tools—Metric series— Dimensions of sockets	_		
8085	Polyethylene fittings for use with polyethylene pipes for the supply of gaseous fuels—Metric series— Specifications	_		
8085-1	*			

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# Polyethylene (PE) pipes for fluids under pressure—Mating dimensions of flange adapters and loose backing flanges (ISO 9624:1997, MOD)

#### 1 Scope

This International Standard specifies the mating dimensions of flange adaptors of thermoplastic materials and the corresponding dimensions of loose backing flanges to be used with thermoplastic pipes under pressure.

It applies to flange adaptors and loose backing flanges for use with pipes with nominal outside diameters  $d_n$  from 16 mm to 1 200 mm and nominal pressures up to 16 bar<sup>1)</sup> (PN 16).

Tables 2 and 3 specify dimensions for socket fusion systems of polyethylene (PE) and polypropylene (PP) and solvent-cemented systems of unplasticized poly(vinyl chloride) (PVC-U), chlorinated poly(vinyl chloride) (PVC-C) and acrylonitrile/butadiene/styrene (ABS).

Tables 3 to 5 specify dimensions for butt fusion systems of polyethylene (PE) and polypropylene (PP).

#### 2 Normative references

The following standards contain provisions which, through reference in this text, constitute provisions of this International Standard. At the time of publication, the editions indicated were valid. All standards are subject to revision, and parties to agreements based on this International Standard are encouraged to investigate the possibility of applying the most recent editions of the standards indicated below. Members of IEC and ISO maintain registers of currently valid International Standards.

ISO 161-1:1996, Thermoplastic pipes for the conveyance of fluids — Nominal outside diameters and nominal pressures — Part 1: Metric series.

ISO 261:1973, ISO general purpose metric screw threads — General plan.

ISO 273:1979, Fasteners — Clearance holes for bolts and screws.

ISO 727:1985, Fittings of unplasticized polyvinyl chloride (PVC-U), chlorinated polyvinyl chloride (PVC-C) or acrylonitrile/butadiene/styrene (ABS) with plain sockets for pipes under pressure — Dimensions of sockets — Metric series.

ISO 7005-1:1992, Metallic flanges — Part 1: Steel flanges.

ISO 7279:1984, Polypropylene (PP) fittings for pipes under pressure — Sockets for fusion using heated tools — Metric series — Dimensions of sockets.

ISO 8085-1:—<sup>2)</sup>, Polyethylene fittings for use with polyethylene pipes for the supply of gaseous fuels — Metric series — Specifications — Part 1: Fittings for socket fusion using heated tools.

- 1)  $1 \text{ bar} = 10^5 \text{ N/m}^2 = 0.1 \text{ MPa}$
- 2) To be published.





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