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Second edition  
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## **Thermoplastics piping systems for fluids under pressure — Flange adapters and loose backing flanges — Mating dimensions**

*Systèmes de canalisations thermoplastiques pour fluides sous  
pression — Collets et brides folles plates — Dimensions de  
raccordement*



Reference number  
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## Contents

	Page
<b>Foreword</b> .....	<b>iv</b>
<b>Introduction</b> .....	<b>v</b>
<b>1 Scope</b> .....	<b>1</b>
<b>2 Normative references</b> .....	<b>1</b>
<b>3 Terms and definitions</b> .....	<b>2</b>
<b>4 Symbols and abbreviated terms</b> .....	<b>2</b>
<b>5 Dimensions</b> .....	<b>3</b>
5.1 General.....	3
5.2 Butt fusion systems.....	3
5.3 Socket fusion systems.....	8
5.4 Adhesive bonded systems.....	9
<b>6 Gaskets</b> .....	<b>12</b>
<b>7 Marking</b> .....	<b>12</b>
7.1 Minimum required marking of flange adapters.....	12
7.2 Minimum required marking of loose backing flanges.....	13
<b>Annex A (informative) Gaskets</b> .....	<b>14</b>
<b>Annex B (informative) Guidance for the application of the bolt torque</b> .....	<b>15</b>
<b>Annex C (informative) Recommended dimensions for PE100 flange adapter in relation to the loose backing flanges PN</b> .....	<b>17</b>
<b>Bibliography</b> .....	<b>19</b>

## Foreword

ISO (the International Organization for Standardization) is a worldwide federation of national standards bodies (ISO member bodies). The work of preparing International Standards is normally carried out through ISO technical committees. Each member body interested in a subject for which a technical committee has been established has the right to be represented on that committee. International organizations, governmental and non-governmental, in liaison with ISO, also take part in the work. ISO collaborates closely with the International Electrotechnical Commission (IEC) on all matters of electrotechnical standardization.

The procedures used to develop this document and those intended for its further maintenance are described in the ISO/IEC Directives, Part 1. In particular, the different approval criteria needed for the different types of ISO documents should be noted. This document was drafted in accordance with the editorial rules of the ISO/IEC Directives, Part 2 (see [www.iso.org/directives](http://www.iso.org/directives)).

Attention is drawn to the possibility that some of the elements of this document may be the subject of patent rights. ISO shall not be held responsible for identifying any or all such patent rights. Details of any patent rights identified during the development of the document will be in the Introduction and/or on the ISO list of patent declarations received (see [www.iso.org/patents](http://www.iso.org/patents)).

Any trade name used in this document is information given for the convenience of users and does not constitute an endorsement.

For an explanation of the voluntary nature of standards, the meaning of ISO specific terms and expressions related to conformity assessment, as well as information about ISO's adherence to the World Trade Organization (WTO) principles in the Technical Barriers to Trade (TBT) see [www.iso.org/iso/foreword.html](http://www.iso.org/iso/foreword.html).

This document was prepared by Technical Committee ISO/TC 138, *Plastics pipes, fittings and valves for the transport of fluids*, Subcommittee SC 2, *Plastics pipes and fittings for water supplies*.

This second edition cancels and replaces the first edition (ISO 9624:1997), which has been technically revised.

The main changes compared to the previous edition are:

- increase of dimensions up to 2 500 mm;
- technical consistency with industrial applications standards;
- addition of two informative annexes on gaskets and torque application.

Any feedback or questions on this document should be directed to the user's national standards body. A complete listing of these bodies can be found at [www.iso.org/members.html](http://www.iso.org/members.html).

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## Introduction

This document covers the dimensions of flange adapters and loose backing flanges which are commonly used in the connection of plastic piping systems to valves, pumping stations or other equipment, and to pipelines of the same or other material. Some equipment (e.g. butterfly valves) may require specific designs that are not covered by this document.

This revised version of this document covers dimensions allowing the connection of plastic piping systems up to DN 2500, to answer the increasing demand of large dimensions on the market.

Flanged joints should be able to transfer long-term axial forces with maintained tightness, which requires use of suitable components and a correct assembly. This revised version includes informative annexes addressing joint design and torque application and gives bibliographic references to installation guidelines which are available on the market.