

Plastics piping systems for water supply — Polyethylene (PE) —

Part 1: General

The European Standard EN 12201-1:2003 has the status of a
British Standard

ICS 23.040.01; 91.140.60

National foreword

This British Standard is the official English language version of EN 12201-1:2003. Collectively, EN 12201-1, EN 12201-2 and EN 12201-5 comprise a revision of:

- BS 6572:1985, *Specification for blue polyethylene pipes up to nominal size 63 for below ground use for potable water*;
- BS 6730:1986, *Specification for black polyethylene pipes up to nominal size 63 for above ground use for cold potable water*.

It is intended that these British Standards will be declared obsolescent by March 2005.

NOTE 1 The UK water industry has indicated that following the publication of this British Standard, the following Water Industry Specification will be declared obsolescent by March 2005 and retained for reference where applicable:

- WIS 4-32-17 (Issue 2), *Specification for polyethylene pressure pipes for pressurised water supply and sewerage duties*.¹⁾

The UK participation in its preparation was entrusted by Technical Committee PRI/88 (previously PRI/61), Plastics piping systems, to Subcommittee PRI/88/2 (previously PRI/61/2), Plastics piping systems for pressure applications, which has the responsibility to:

- aid enquirers to understand the text;
- present to the responsible international/European committee any enquiries on the interpretation, or proposals for change, and keep the UK interests informed;
- monitor related international and European developments and promulgate them in the UK.

A list of organizations represented on this subcommittee can be obtained on request to its secretary.

NOTE 2 It was decided not to proceed with the publication of prEN 12201-6, *Recommended practice for installation*, and that existing national practices would be applicable. In the UK, in the absence of a British Standard covering installation, it is the opinion of Technical Committee PRI/88, Plastics piping systems, that reference to the *Polyethylene Pipe Systems Manual*²⁾, a joint publication of WRc and BPF Plastic Pipes Group represents established UK practice.

NOTE 3 Part 7 has been prepared as a CEN/TS, to allow further development. CEN/TS 12201-7 is not mandatory under the Public Procurement Directive.

This British Standard, was published under the authority of the Standards Policy and Strategy Committee on 5 December 2003

¹⁾ Published by WRc, Swindon.
²⁾ WRc/BPF PLASTIC PIPES GROUP. *Polyethylene Pipe Systems Manual*. Swindon: WRc, 2002.

Amendments issued since publication

Amd. No.	Date	Comments

Attention is drawn to the following statutory regulations:

Health and Safety at Work etc. Act 1974 and subsequent regulations.

Attention is also drawn to any appropriate safety precautions. It is assumed in the drafting of a standard that the execution of its provisions is entrusted to appropriately qualified people.

Additional information

With reference to the Introduction and Clause 5, as yet there is no pan-European agreement on water quality requirements, so existing UK regulations remain in force. Regulation 25 of the Water Supply (Water Quality) Regulations 1989 specifies the circumstances in which water undertakers may use products in contact with water supplies in England and Wales. As part of the UK regulations, all pipes and fittings used to convey drinking water supplies are required to be approved under the provisions of Regulation 25(1) (a) or (b) as appropriate and the Water Regulation Advisory Scheme (WRAS) to ensure that their use will not cause adverse effect on water quality or a risk to health of consumers. In Scotland and Northern Ireland there are similar provisions. These regulations will be revised as necessary to comply with the EU Drinking Water Quality Directive.

The UK National Annex NA attached to this standard provides additional information on the selection and installation of piping systems and components in the UK.

Cross-references

The British Standards which implement international or European publications referred to in this document may be found in the *BSI Catalogue* under the section entitled "International Standards Correspondence Index", or by using the "Search" facility of the *BSI Electronic Catalogue* or of British Standards Online.

This publication does not purport to include all the necessary provisions of a contract. Users are responsible for its correct application.

Compliance with a British Standard does not of itself confer immunity from legal obligations.

Summary of pages

This document comprises a front cover, an inside front cover, pages i and ii, the EN title page, pages 2 to 18, an inside back cover and a back cover.

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English version

Plastics piping systems for water supply - Polyethylene (PE) - Part 1: General

Systèmes de canalisations en plastiques pour alimentation
en eau - Polyéthylène (PE) - Partie 1: Généralités

Kunststoff-Rohrleitungssysteme für die Wasserversorgung -
Polyethylen (PE) - Teil 1: Allgemeines

This European Standard was approved by CEN on 27 December 2002.

CEN members are bound to comply with the CEN/CENELEC Internal Regulations which stipulate the conditions for giving this European Standard the status of a national standard without any alteration. Up-to-date lists and bibliographical references concerning such national standards may be obtained on application to the Management Centre or to any CEN member.

This European Standard exists in three official versions (English, French, German). A version in any other language made by translation under the responsibility of a CEN member into its own language and notified to the Management Centre has the same status as the official versions.

CEN members are the national standards bodies of Austria, Belgium, Czech Republic, Denmark, Finland, France, Germany, Greece, Hungary, Iceland, Ireland, Italy, Luxembourg, Malta, Netherlands, Norway, Portugal, Slovakia, Spain, Sweden, Switzerland and United Kingdom.



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Foreword

This document EN 12201-1:2003 has been prepared by Technical Committee CEN /TC 155, "Plastics piping systems and ducting systems" the secretariat of which is held by NEN.

This European Standard shall be given the status of a national standard, either by publication of an identical text or by endorsement, at the latest by September 2003, and conflicting national standards shall be withdrawn at the latest by March 2005.

This standard is a Part of a System Standard for plastics piping systems of a particular material for a specified application. There are a number of such System Standards.

System Standards are based on the results of the work being undertaken in ISO/TC 138 "*Plastics pipes, fittings and valves for the transport of fluids*", which is a Technical Committee of the International Organization for Standardization (ISO).

They are supported by separate standards on test methods to which references are made throughout the System Standard.

The System Standards are consistent with standards on general functional requirements and standards on recommended practice for installation.

This European Standard consists of the following Parts, under the general title *Plastics piping systems for water supply — Polyethylene (PE)*:

- *Part 1: General* (this standard).
- *Part 2: Pipes*.
- *Part 3: Fittings*.
- *Part 4: Valves*.
- *Part 5: Fitness for purpose of the system*.
- *Part 7: Guidance for the assessment of conformity*.¹⁾

NOTE It was decided not to publish a Part 6: Recommended practice for installation. Instead, existing national practices would be applicable.

This Part of this European Standard includes the following:

- Annex A (informative): Pressure reduction coefficients;
- Bibliography.

System Standards for piping systems of other plastics materials used for the conveyance of water under pressure include the following:

EN 1452, *Plastics piping systems for water supply — Unplasticized poly(vinyl chloride) (PVC-U)*.

prEN 1796, *Plastics piping systems for water supply with or without pressure — Glass-reinforced thermosetting plastics (GRP) based on polyester resin (UP)*.

For components which have conformed to the relevant national standard before [DAV], as shown by the manufacturer or by a certification body, the national standard may continue to be applied until the [DAV + 24 months].

According to the CEN/CENELEC Internal Regulations, the national standards organizations of the following countries are bound to implement this European Standard : Austria, Belgium, Czech Republic, Denmark, Finland, France, Germany, Greece, Hungary, Iceland, Ireland, Italy, Luxembourg, Malta, Netherlands, Norway, Portugal, Slovak Republic, Spain, Sweden, Switzerland and the United Kingdom.

¹⁾ to be published as a Technical Specification

Introduction

The System Standard, of which this is Part 1, specifies the requirements for a piping system and its components when made from polyethylene (PE). It is intended to be used for water supply intended for human consumption, including the conveyance of raw water prior to treatment.

In respect of potential adverse effects on the quality of water intended for human consumption, caused by the products covered by EN 12201:

- a) this standard provides no information as to whether the products may be used without restriction in any of the Member States of the EU or EFTA;
- b) it should be noted that, while awaiting the adoption of verifiable European criteria, existing national regulations concerning the use and/or the characteristics of these products remain in force.

Requirements and test methods for components of the piping system are specified in EN 12201-2, EN 12201-3 and EN 12201-4.

Characteristics for fitness for purpose are covered in EN 12201-5. PrCEN/TS 12201-7 gives guidance for the assessment of conformity.

This Part of EN 12201 covers the general aspects of the plastics piping system.