

English Version

**Gas infrastructure - Pipelines for maximum operating
pressure up to and including 16 bar - Part 5: Service lines -
Specific functional requirements**

Infrastructures gazières - Canalisations pour pression
de service maximale inférieure ou égale à 16 bar -
Partie 5: Branchements - Recommandations
fonctionnelles spécifiques

Gasinfrastruktur - Rohrleitungen mit einem maximal
zulässigen Betriebsdruck bis einschließlich 16 bar -
Teil 5: Hausanschlussleitungen - Spezifische
funktionale Anforderungen

This draft European Standard is submitted to CEN members for enquiry. It has been drawn up by the Technical Committee CEN/TC 234.

If this draft becomes a European Standard, 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.

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Recipients of this draft are invited to submit, with their comments, notification of any relevant patent rights of which they are aware and to provide supporting documentation.

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EUROPEAN COMMITTEE FOR STANDARDIZATION
COMITÉ EUROPÉEN DE NORMALISATION
EUROPÄISCHES KOMITEE FÜR NORMUNG

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European foreword

This document (prEN 12007-5:2023) has been prepared by Technical Committee CEN/TC 234 "Gas infrastructure", the secretariat of which is held by NSAI.

This document is currently submitted to the CEN Enquiry.

This document will supersede EN 12007-5:2014.

In comparison with the previous edition, the following technical changes have been made:

- Revision to scope;
- Introduction of definition of gas to include hydrogen rich and methane rich gases, dimethyl ether (DME) and propane and butanes;
- Introduction of definitions for pressed joints terminology;
- Revision to subclause 5.1;
- Introduction of new Annex A, Material, component and joint selection;
- Revision to Annex B, Jointing methods.

This document has been prepared under a Standardization Request given to CEN by the European Commission and the European Free Trade Association and supports essential requirements of EU Directive(s) / Regulation(s).

This European Standard is part of the series EN 12007 "Gas infrastructure — Pipelines for maximum operating pressure up to and including 16 bar" which comprises the following parts:

- *Part 1: General functional requirements;*
- *Part 2: Specific functional requirements for polyethylene (MOP up to and including 10 bar);*
- *Part 3: Specific functional requirements for steel;*
- *Part 4: Specific functional requirements for renovation;*
- *Part 5: Specific functional recommendations of new service lines.*

Introduction

This document describes the general functional requirements for gas supply through service line pipe systems and covers the pressure range up to and including 16 bar maximum operating pressure (MOP). It gives normative and informative references for safe and secure gas infrastructures. It applies to their design, construction, operation and the related aspects of safety, environment and public health, all in order to provide a safe and secure supply of gas.

This document is intended to be used in addition to the EN 12007 series of European Standards.

The requirements of this document are based on safe gas engineering practice under conditions normally encountered in the gas industry. Requirements for all unusual conditions cannot be specifically provided for, nor are all engineering and construction details prescribed.

Existing industrial safety regulations applying to work areas, safety devices and safe work practices are not intended to be superseded by this document.

Persons responsible for the design, construction and operation of gas infrastructures should have regard to the guidance given in this document, the EN 12007 series of European Standards and to other relevant standards. It is the responsibility of these persons to apply these functional requirements, supplemented with other proven good practice to the particular circumstances of each gas infrastructure.

The recommendations in this document are intended to be applied by competent persons who have suitable knowledge and experience. Notes in the text are informative.

The designer, constructor or operator of service line and pipeline systems is cautioned that this document is not a design handbook or code of practice. Additional national or company standards describing the details are needed. These detailed standards should be in line with the basic principles of this document.

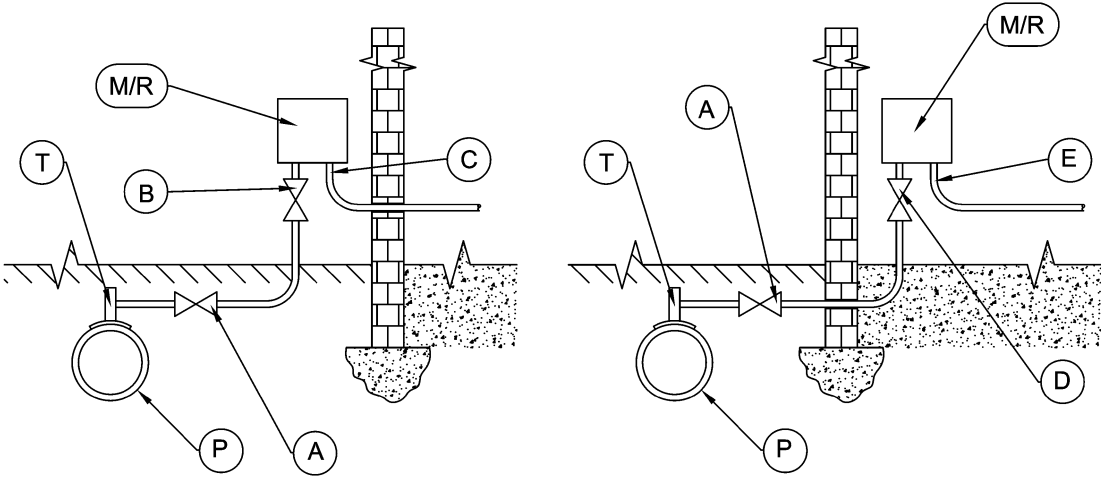
All pressures are gauge pressure unless stated otherwise.

In preparing this document it was recognized that the suite of relevant European Standards is incomplete. Reference may be made where appropriate to international, national or other standards until relevant European Standards are available.

The ownership and operation responsibility can vary between member states. The extent of the service line can differ in each member state. To illustrate this, the various points of deliveries are indicated in Figure 1. Consult Figure 1 (A/B/C/D/E) and member state regulations and standards.

NOTE The valve at point A is not necessarily utilized by each member state.

National preference for points of deliveries should be stated in the national foreword.



Key

- P gas main
- T Top Tee / Branch Saddle / Equal Tee
- M/R Meter and/or Pressure Regulating installation

- Distribution system operator nominated Point(s) of Delivery:
- A outlet of below ground service line valve outside the building
- B outlet of above ground service line valve outside the building
- C outlet of meter/regulator outside the building
- D outlet of above ground service line valve inside the building
- E outlet of meter/regulator inside the building

Figure 1 — Distribution system operator nominated point of delivery