

**Technical drawings —
Seals for dynamic application
Part 1. General simplified representation**

The European Standard EN ISO 9222-1 : 1995 has the status of a
British Standard

ICS 01.100.20;21.140

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Committees responsible for this British Standard

The preparation of this British Standard was entrusted to Technical Committee TDE/4, Engineering drawing practice, upon which the following bodies were represented:

Atomic Weapons Establishment
British Gas plc
British Standards Society
Drawing Office Material Manufacturers' and Dealers' Association
Electricity Association
Gauge and Tool Makers' Association
HEVAC Association
Institution of Chemical Engineers
Institution of Engineering Designers
Power Generation Contractors' Association
Society of British Aerospace Companies Ltd.
University of Warwick

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National foreword

This Part of BS EN ISO 9222 has been prepared by Technical Committee TDE/4 and is the English language version of EN ISO 9222-1 : 1995 *Technical drawings — Seals for dynamic application — Part 1: General simplified representation*, published by the European Committee for Standardization (CEN). It is identical with ISO 9222-1 : 1989, published by the International Organization for Standardization (ISO).

This Part of BS EN ISO 9222 partially supersedes BS 308 : Part 1. It is envisaged that when the full range of European Standards on technical drawing is implemented BS 308 will be withdrawn.

Cross-reference

Publication referred to	Corresponding British Standard
ISO 128 : 1982	BS 308 <i>Engineering drawing practice</i> Part 1 : 1993 <i>Recommendations for general principles</i>

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

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English version

Technical drawings — Seals for dynamic application — Part 1: General simplified representation

(ISO 9222-1 : 1989)

Dessins techniques — Joints d'étanchéité pour
application dynamique —
Partie 1: Représentation simplifiée générale
(ISO 9222-1 : 1989)

Technische Zeichnungen — Dichtungen für
dynamische Belastung —
Teil 1: Allgemeine, vereinfachte Darstellung
(ISO 9222-1 : 1989)

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Up-to-date lists and bibliographical references concerning such national standards may be obtained on application to the Central Secretariat or to any CEN member.

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CEN

European Committee for Standardization
Comité Européen de Normalisation
Europäisches Komitee für Normung

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Foreword

The text of the International Standard ISO 9222-1 : 1989, prepared by ISO/TC 10, Technical drawings, product definition and related documentation, was submitted to the formal vote and was approved by CEN as EN ISO 9222-1 on 1995-02-10 without any modification.

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 August 1995, and conflicting national standards shall be withdrawn at the latest by August 1995.

According to the CEN/CENELEC Internal Regulations, the following countries are bound to implement this European Standard: Austria, Belgium, Denmark, Finland, France, Germany, Greece, Iceland, Ireland, Italy, Luxembourg, Netherlands, Norway, Portugal, Spain, Sweden, Switzerland, United Kingdom.

Introduction

ISO 9222 provides rules for the simplified representation of seals.

The principle of drawing practice is to depict the object to scale using lines. In simplified representations, only essential features are shown, preferably in outline (in order to save time and effort).

The degree of simplification depends on the kind of object represented, the scale of the drawing and the purpose of the documentation. This means that either a general simplified representation or a detailed one may be used. A detailed representation shows more details of a seal, for example the configuration of lips (see ISO 9222-2).

In order to avoid misunderstandings, only one kind of simplification, either the general or the detailed simplified representation, should be used on a drawing.

Technical drawings — Seals for dynamic application —

Part 1: General simplified representation

1 Scope

This part of ISO 9222 specifies the general simplified representation for seals.

This representation should be used when it is not necessary to show the exact shape and details of the seals, for example in assembly drawings.

2 Normative reference

The following standard contains provisions which, through reference in this text, constitute provisions of this part of ISO 9222. At the time of publication, the edition indicated was valid. All standards are subject to revision, and parties to agreements based on this part of ISO 9222 are encouraged to investigate the possibility of applying the most recent edition of the standard indicated below. Members of IEC and ISO maintain registers of currently valid International Standards.

ISO 128 : 1982, *Technical drawings — General principles of presentation*.

3 Method of representation

3.1 Lines

All features of the simplified representation shall be drawn with the same line thickness used for all other visible outlines and edges on the drawing (line type A, ISO 128).

3.2 Scale

The contour of the simplified representation shall be drawn to the same scale as used for the drawing.

3.3 General simplified representation

For general purposes (without specified lip configuration where it is not necessary to show the exact contour), the seal shall be represented by a square and a freestanding diagonal cross centred in the square (see figure 1). The cross shall not touch the outlines.

This representation shall be used in the space on one or both sides of the axis (see for example figure 4, for the case of a horizontal axis).

The representation shown in figure 1 shall be used only when the sealing direction is unimportant. If it is necessary to show the sealing direction, an arrowhead may be added to the diagonal cross (see for example figure 2).

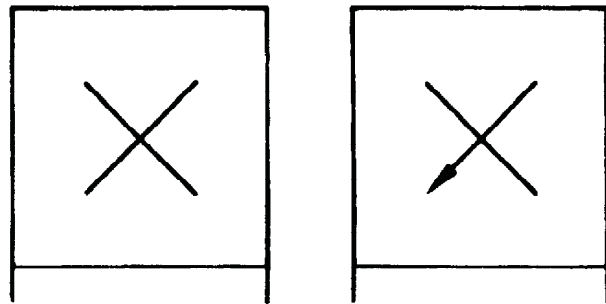


Figure 1

Figure 2

If it is necessary to show the exact contour of a sealing composition, it should be represented by the true outline of its cross-section, with the diagonal cross in a central position (see figure 3). The cross shall not touch the outlines.

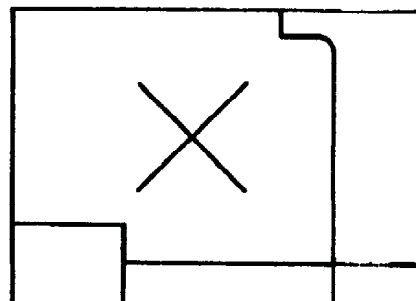


Figure 3

This representation shall be used in the space on one or both sides of the axis (see for example figure 4, for the case of a horizontal axis).

In cases where the seal permits more than one direction of assembly, the desired direction of assembly shall be given, for example by text or specification.

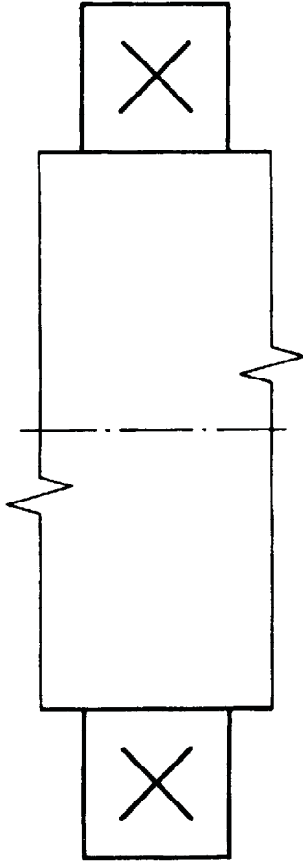


Figure 4

4 Hatching

In simplified representations, hatching should be avoided. If, in special cases, greater clarity is necessary (for example in more detailed representations or illustrations for catalogues in accordance with ISO 9222-2), all inserts and similar elements of the seals should be hatched in the same direction and with continuous thin lines (type B, ISO 128; see figure 5) or blackened (see figure 6).

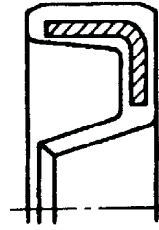


Figure 5

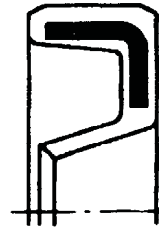


Figure 6

List of references

See national foreword.

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