

Technical drawings — Item references

The European Standard EN ISO 6433 : 1994 has the status of a
British Standard

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

This British Standard, having been prepared under the direction of the Engineering Sector Board, was published under the authority of the Standards Board and comes into effect on 15 October 1995

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National foreword

This British Standard has been prepared by Technical Committee TDE/4 and is the English language version of EN ISO 6433 : 1995 *Technical drawings — Item references*, published by the European Committee for Standardization (CEN). It is identical with ISO 6433 : 1981, published by the International Organization for Standardization (ISO).

This British Standard 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 It is envisaged that when the full range of European Standards on technical drawing is implemented BS 308 will be withdrawn.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-references

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>
ISO 3098-1 : 1974	Part 1 : 1993 <i>Recommendations for general principles</i>

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

ICS 01.100.10

Descriptors: Drawings, graphic methods, generalities

English version

Technical drawings — Item references

(ISO 6433 : 1981)

Dessins techniques — Repères des éléments
(ISO 6433 : 1981)

Technische Zeichnungen — Positionsnummern
(ISO 6433 : 1981)

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CEN

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

Central Secretariat: rue de Stassart 36, B-1050 Brussels

Foreword

This European Standard was taken over by CEN from the work of ISO/TC 10, Technical drawings, product definition and related documentation, of the International Standards Organization (ISO).

The Technical Board had decided to submit the final draft for Formal Vote. The result was positive.

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 April 1995, and conflicting national standards shall be withdrawn at the latest by April 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

Technical drawings — Item references

1 Scope and field of application

This International Standard gives general rules for the application and presentation of item references on technical drawings.

In the context of this International Standard the purpose of item references is restricted to the identification of component parts of assemblies and/or the identification of individual items detailed on the same drawing.

2 References

ISO 128, *Technical drawings — General principles of presentation*.¹⁾

ISO 3098/1, *Technical drawings — Lettering — Part 1: Currently used characters*.

ISO 7573, *Technical drawings — Item list*.²⁾

3 General requirements

3.1 It is recommended that item references be assigned in sequential order to each component part shown in an assembly and/or each detailed item on the drawing.

Identical parts shown in the same assembly shall have the same item reference.

Each complete sub-assembly incorporated in the main assembly shown on the drawing can be identified by a single item reference.

NOTE — If the drawing concerns one part only, it is not necessary to assign an item reference, the drawing number being already an adequate means of identifying the part concerned.

3.2 All item references shall be shown in an item list (see ISO 7573) giving the appropriate information on the items concerned.

4 Presentation

4.1 Item references should generally be composed of arabic numerals only. They may, however, be augmented by capital letters when necessary.

The design, dimensions and spacing of the characters shall comply with ISO 3098/1.

4.2 All item references on the same drawing shall be of the same type and height of lettering. They must be clearly distinguishable from all other indications. This can be achieved for example by :

- a) using characters of a larger height, for example twice the height as used for dimensioning and similar indications;
- b) encircling the characters of each item reference (see figure 3); in that case, the circles shall have the same diameter and be drawn with continuous thin lines (type B of ISO 128);
- c) combining methods a) and b).

4.3 Item references shall be placed outside the general outlines of the items concerned.

Each item reference should be connected to its associated item by a leader line (see figures 1, 2 and 3), the termination of which shall comply with ISO 128.

The leader line may be omitted if the relation between the item reference and its associated item is evident.

Leader lines shall not intersect. They should be kept as short as practicable and generally they should be drawn at an angle to the item reference. In the case of encircled item references, the leader line shall be directed towards the centre of the circle.

¹⁾ At present at the stage of draft. (Revision of ISO/R 128-1959.)

²⁾ At present at the stage of draft.

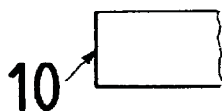


Figure 1



Figure 2

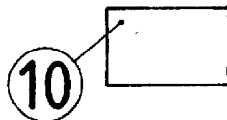


Figure 3

4.4 For the sake of clarity and legibility of the drawing, item references should be arranged preferably in vertical columns and/or horizontal rows (see figure 4).

4.5 Item references of related items may be shown against the same leader line (see figure 4, items 8, 9, 10 and 11).

4.6 Item references of identical items need only be shown once, provided that there is no risk of ambiguity.

4.7 A distinct sequence for numbering should be adopted :

- according to the possible order of assembly;
- according to the importance of the component parts (sub-assemblies, major parts, minor parts, etc.).
- according to any other logical sequence.

5 Example

An example of the application of item references for an assembly is given in figure 4.

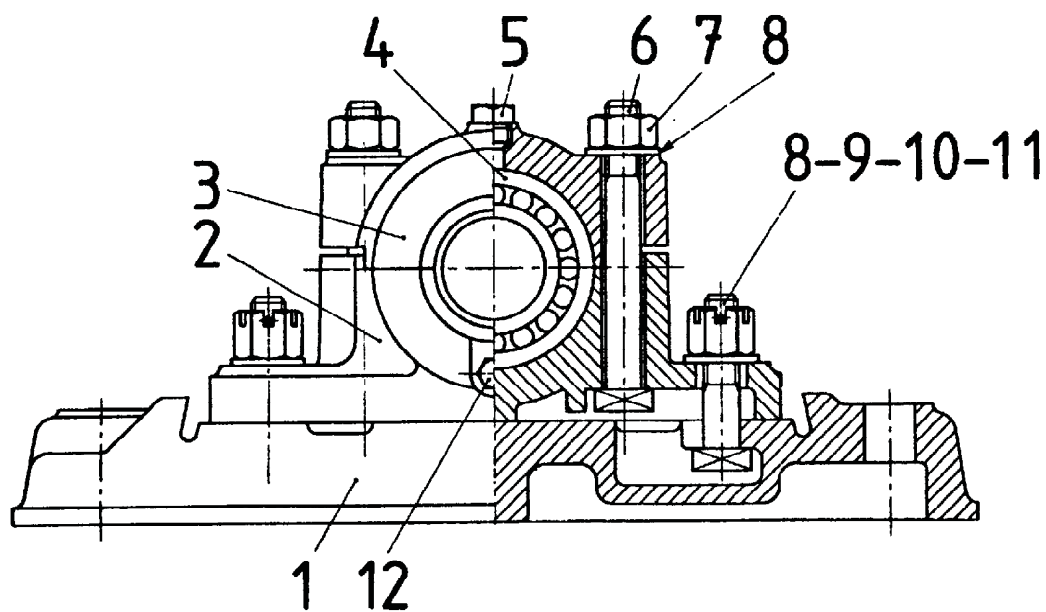


Figure 4

List of references

See national foreword.

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