JIS

JAPANESE INDUSTRIAL STANDARD

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# JIS Z 8313-0 : 1998

(ISO/FDIS 3098-0 : 1997)

# Technical drawings—Lettering—Part 0 : General requirements

**ICS** 01.100.01

**Descriptors** : technical drawing, specifications, character sets, graphic characters

**Reference number** : **JIS Z 8313-0 : 1998 (E)**

## Foreword

This translation has been made based on the original Japanese Industrial Standard established by the Minister of International Trade and Industry through deliberations at Japanese Industrial Standards Committee in accordance with the Industrial Standardization Law. Consequently **JIS Z 8313** : 1984 is abolished and replaced with **JIS Z 8313** group.

By this establishment, **JIS Z 8313** group, except its Part 10, becomes identical with the corresponding part of **ISO 3098**, *Technical drawings—Lettering*.

**JIS Z 8313** group, inclusive of forward and title, is named *Technical drawings—Lettering*, and consists of the following parts.

Part 0 : *General requirements*
Part 1 : *Currently used characters*
Part 2 : *Greek characters*
Part 3 : *Diacritical and particular marks for the Latin alphabets (scheduled)*
Part 4 : *Cyrillic characters (scheduled)*
Part 5 : *CAD lettering of the Latin alphabet, numerals and marks (scheduled)*
Part 10 : *Japanese characters*
Remarks : Part 10 is the specification for KANA and KANJI and does not exist in the original International Standard.

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In the event of any doubts arising as to the contents, the original JIS is to be the final authority.



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# Technical drawings—Lettering—Part 0: General requirements

**Introduction** This part of Japanese Industrial Standard **Z 8313** has been prepared based on **ISO/FDIS 3098-0** circulated in 1997 without changing the technical contents.

The description underlined with dots in this part is not included in the original International Standard.

**1 Scope** This part of **JIS Z 8313** specifies the general requirements for lettering, in accordance with all other parts of this Standard, to be used in technical product documentation (in particular on technical drawings).

It includes basic conventions as well as rules for the application of lettering using the following techniques:

a) free-hand lettering;

b) templates (see **ISO 9178**) and manual lettering instruments;

c) dry transfer systems;

d) numerically controlled lettering and draughting systems.

Note The International Standard corresponding to this Standard is as follows.

ISO/FDIS 3098-0 : 1997 *Technical product documentation — Lettering — Part 0: General requirements*

**2 Normative reference** The following standard contains provisions which, through reference in this text, constitute provisions of this part of **JIS Z 8313**. For this normative reference, the most recent edition (including Amendment) shall apply.

ISO 128-20 *Technical drawings — General principles of presentation — Part 20: Basic conventions for lines.*

**3 Definitions** For the purposes of this part of **JIS Z 8313**, the following definitions apply.

**3.1 central line** Imaginary line in the middle of each line or line element which is a constitutive part of a graphic character set.

Notes 1 Lines may be drawn by means of tubular technical pens conforming with **ISO 9175-1** and **ISO 9175-2**.

2 The central line is the basic datum for the design of tools for lettering, e.g. engraving tools for templates, programs for lettering generators.

**3.2 graphic character set** Finite set of different graphic characters in a fixed type of lettering, including letters of a certain alphabet, numerals, diacritical marks, punctuation marks and additional graphical symbols, that is considered complete for a given purpose (see also **JIS X 0004**).

### 3.3 lettering

a) Procedure of writing graphic characters taken from a graphic character set on a (technical) drawing carrier (in addition to the graphical representation).

b) The whole of the nongraphical information on a (technical) drawing carrier (text, instructions, dimensions, etc.).

c) The whole of the graphic characters of a graphic character set which can be used for transferring nongraphical information onto a (technical) drawing carrier.

**4 General requirements** The basic characteristics required of lettering are given in **4.1** to **4.3**.

**4.1** Legibility, which shall be maintained by a space between characters of twice the line width used for lettering.

This spacing may be reduced to one line width for a better visual effect with combinations of particular characters, e.g. LA, TV or Tr.

**4.2** Suitability for the generally used copying processes (diazo copying, microfilming, telefax, etc.).

**4.3** Suitability for numerically controlled draughting systems.

## 5 Dimensions

**5.1 Nominal size** The nominal size of lettering is defined by the height ($h$) of the outline contour of the upper-case (capital) letters (see Fig. 1 and Tables 1 and 2).

The dimensions shown in Figs. 1 to 3 as applied to the Latin (L) alphabet shall also be applied to the Cyrillic (C) and Greek (G) alphabets.

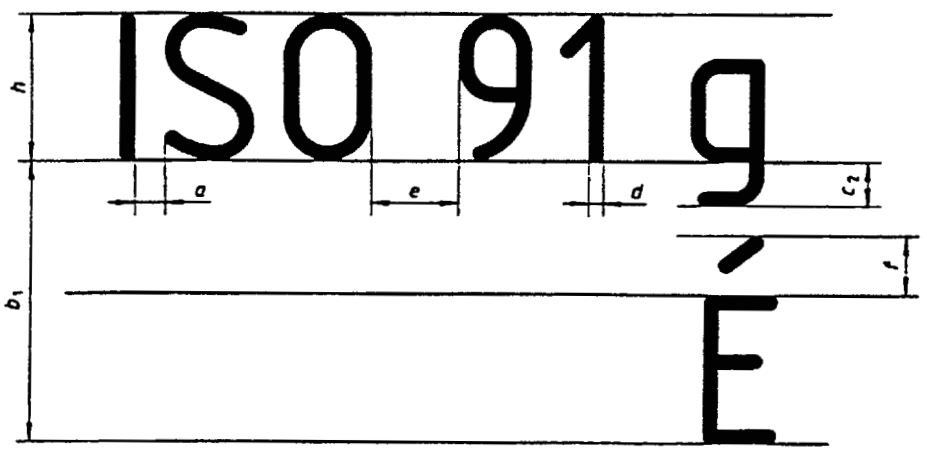


**Fig. 1**