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**Technical drawings — General
principles of presentation —
Basic convention for lines**

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Descriptors : technical drawing, lines (geometry), engineering drawings

Reference number : JIS Z 8312 : 1999 (E)

Z 8312 : 1999 (ISO 128-20 : 1996)

Foreword

This translation has been made based on the original Japanese Industrial Standard revised 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 8312 :1984** is replaced with **JIS Z 8312 :1999**.

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Technical drawings — General principles of presentation — Basic convention for lines

Introduction This Japanese Industrial Standard has been prepared based on ISO 128-20, *Technical drawings — General principles of presentation — Part 20 : Basic convention for lines* issued in 1996 without changing the technical contents.

The general principles in this Standard shall apply to the presentation of lines used in all kinds of technical product documentation.

The application of lines within drawings in special technical fields varies considerably. Therefore rules of application are not given in this Standard. Other International Standards containing rules for lines in specialized fields are listed in Annex A.

The descriptions underlined with dots in this Standard are not included in the original International Standard.

1 Scope This Standard establishes the types of lines, their designations and their configurations, as well as general rules for draughting of lines used in technical drawings, e.g. diagrams, plans or maps.

Remarks : The International Standard corresponding to this Standard is as follows.

ISO 128-20:1996 *Technical drawings — General principles of presentation — Part 20 : Basic convention for lines*

2 Definitions For the purposes of this Standard, the following definitions apply.

2.1 line Geometrical object, the length of which is more than half of the line width and which connects an origin with an end in any way, e.g. straight, curved, without or with interruptions.

Remarks 1 The origin and the end may coincide with one another, e.g. in the case of a line forming a circle.

2 A line, the length of which is less than or equal to half of the line width, is called a dot.

3 A test should be made in order to check the appearance of drawings intended to be microcopied or transferred by fax.

2.2 line element Single part of a non-continuous line, e.g. dots, dashes, which vary in length, and gaps.

2.3 line segment Group of two or more different line elements which form a non-continuous line, e.g. long dash/gap/dot/gap/dot/gap.

3 Types of lines

3.1 Basic types The basic types (called line type) are in accordance with Table 1

Table 1

No.	Basic type (line type)	Description
01		continuous line
02		dashed line
03		dashed spaced line
04		long dashed dotted line
05		long dashed double-dotted line
06		long dashed triplicate-dotted line
07		dotted line
08		long dashed short dashed line
09		long dashed double-short dashed line
10		dashed dotted line
11		double-dashed dotted line
12		dashed double-dotted line
13		double-dashed double-dotted line
14		dashed triplicate-dotted line
15		double-dashed triplicate-dotted line

Informative reference : The “description” expresses the “line element” such as the following. The designations and definitions of line elements are according to Table 3.