INTERNATIONAL STANDARD

ISO 7588-1

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Road vehicles — Electrical/electronic switching devices —

Part 1:
Relays and flashers

Véhicules routiers — Dispositifs électriques/électroniques de commutation — Partie 1: Relais et centrales clignotantes

Reference numbe
ISO 7588-1:1998(E)

Foreword

ISO (the International Organization for Standardization) is a worldwide federation of national standards bodies (ISO member bodies). The work of preparing International Standards is normally carried out through ISO technical committees. Each member body interested in a subject for which a technical committee has been established has the right to be represented on that committee. International organizations, governmental and non-governmental, in liaison with ISO, also take part in the work. ISO collaborates closely with the International Electrotechnical Commission (IEC) on all matters of electrotechnical standardization.

Draft International Standards adopted by the technical committees are circulated to the member bodies for voting. Publication as an International Standard requires approval by at least 75 % of the member bodies casting a vote.

International Standard ISO 7588-1 was prepared by Technical Committee ISO/TC 22, *Road vehicles*, Subcommittee SC 3, *Electrical and electronic equipment*.

This first edition of ISO 7588-1 cancels and replaces ISO 7588:1983, which has been technically revised.

ISO 7588 consists of the following parts, under the general title *Road vehicles — Electrical/electronic switching devices*:

— *Part 1: Relays and flashers*

— *Part 2: Electronic devices*

— *Part 3: Microrelays*

Annexes A and B of this part of ISO 7588 are for information only.

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Road vehicles — Electrical/electronic switching devices —

Part 1:
Relays and flashers

1 Scope

This part of ISO 7588 specifies dimensional characteristics and the functional allocation of relay and flasher terminals intended for road vehicles.

Annex A gives additional information on the dimensions of socket apertures and annex B gives additional information on the different terminal functional allocation of flasher unit systems.

2 Normative references

The following standards contain provisions which, through reference in this text, constitute provisions of this part of ISO 7588. At the time of publication, the editions indicated were valid. All standards are subject to revision, and parties to agreements based on this part of ISO 7588 are encouraged to investigate the possibility of applying the most recent editions of the standards indicated below. Members of IEC and ISO maintain registers of currently valid International Standards.

ISO 8092-1:1996, *Road vehicles — Connections for on-board electrical wiring harnesses — Part 1: Tabs for single-pole connections — Dimensions and specific requirements.*

ISO 8092-2:—[1], *Road vehicles — Connections for on-board electrical wiring harnesses — Part 2: Definitions, test methods and general performance requirements.*

3 Definitions

For the purposes of this part of ISO 7588, the definitions given in ISO 8092-2 apply.

4 Dimensions and other requirements

4.1 General

Dimensional characteristics and other requirements are specified in 4.2 to 4.4.

NOTE — All corresponding dimensions also apply if less than five tabs are fitted.

The dimensions of socket apertures given in annex A are for information only.

The functional allocation of relay terminals is specified in clause 5 and that of flasher terminals is shown in annex B.

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1) To be published. (Revision of ISO 8092-2:1996)

4.2 Positioning zones of the tabs and socket apertures

4.2.1 Location of tabs and apertures — True position

See figure 1.

Dimensions in millimetres

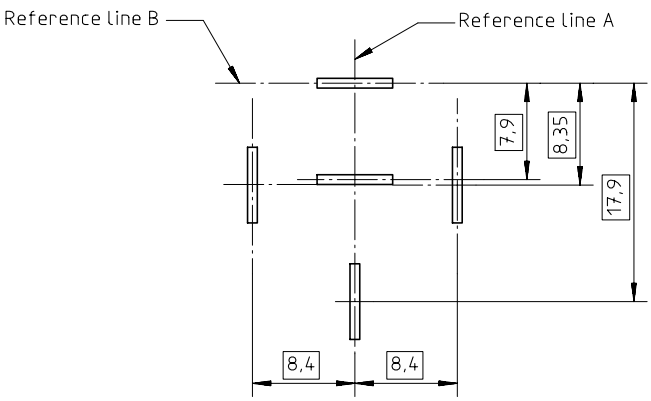


Figure 1

4.2.2 Dimensional limits of the tabs

See figure 2.

The tabs shall be in accordance with ISO 8092-1, size 6,3 × 0,8, and shall not have shoulders.

Dimensions in millimetres

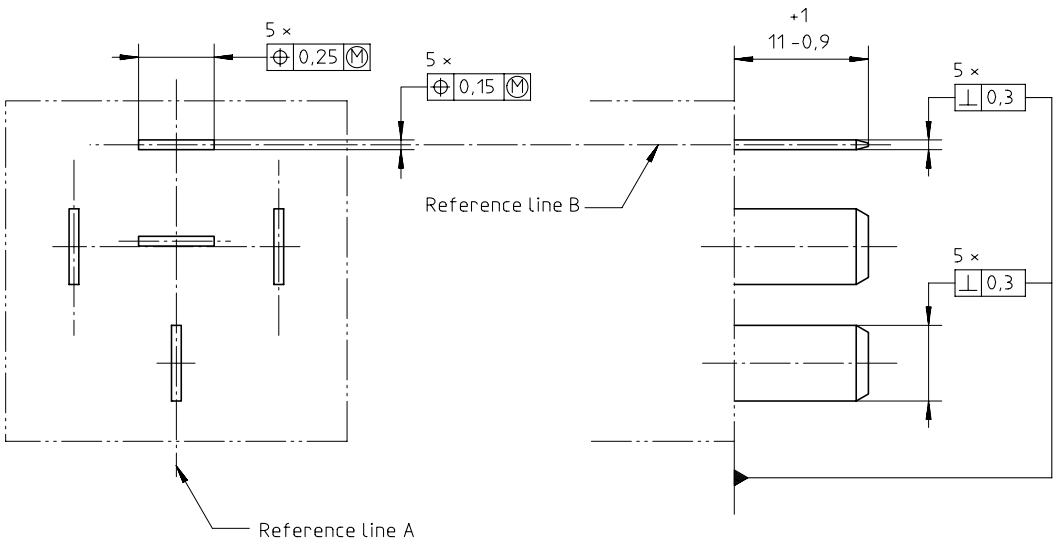


Figure 2

4.3 Overall dimensions and other requirements for relays and flashers

See figure 3 and table 1.

Configurations other than rectangular are permitted, provided they lie within the specified area.

However, in all cases the outside contour shall lie within the dimensions X and Y (maximum) given in figure 3 and in table 1.

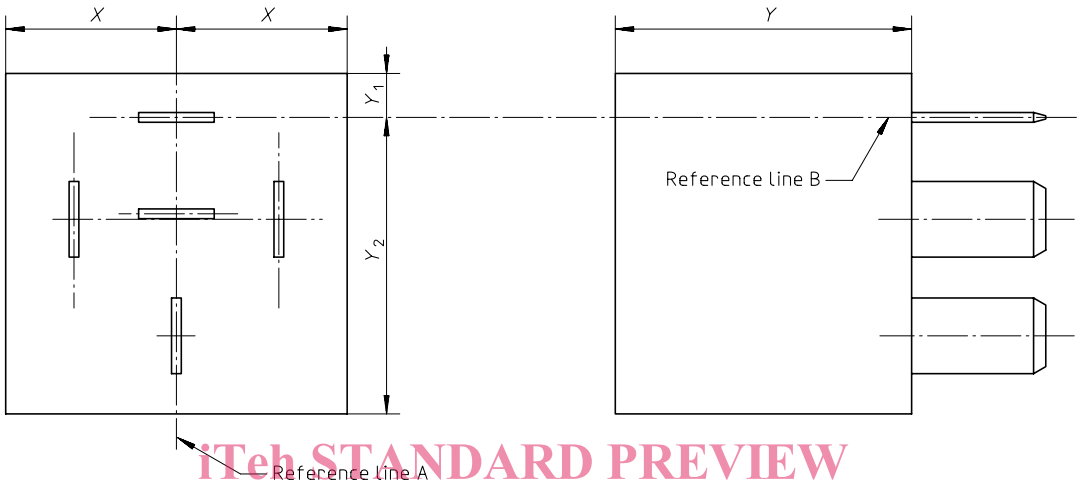


Figure 3

Table 1

Dimensions in millimetres

			1 max.	Y_2 max.	Z max.
Relays	A	14	3,6	24,3	30
	B	15,3	5,0	25,7	40
Flashers	C	15,3	5,0	25,7	55
	D	17	9,6	30,3	55
	E	20	9,6	30,3	55

4.4 Other requirements for sockets

4.4.1 Apertures at the entering plane shall be in accordance with figure 1 and shall accept tabs to the maximum limits.

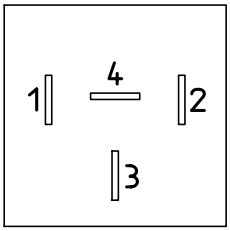
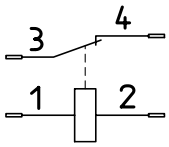
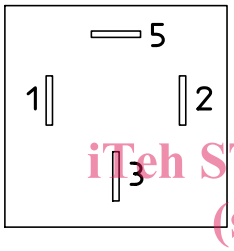
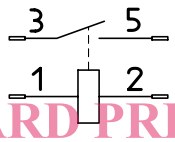
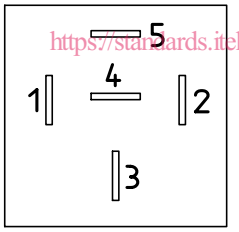
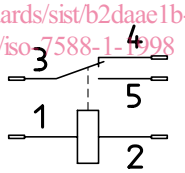
4.4.2 In order to avoid the need for excessive withdrawal force, it is recommended that the female connectors in the socket should not incorporate detents.

5 Functional allocation of the terminals

5.1 Functional allocation of relay terminals

In table 2 the terminal positions are shown from the termin al connection side.

Table 2

Contact type	Arrangement of the terminals[1)]	Wiring diagram (basic types)[1)]	Functional allocation of the terminals[1)]
1 (Break contact)			1 = Coil [2)] 2 = Coil [2)] 3 = Switching contact input (moving contact) 4 = Switching contact output (break contact)
2 (Make contact)			1 = Coil [2)] 2 = Coil [2)] 3 = Switching contact input (moving contact) 5 = Switching contact output (make contact)
3 (Changeover contact)			1 = Coil [2)] 2 = Coil [2)] 3 = Switching contact input (moving contact) 4 = Switching contact output (break contact) 5 = Switching contact output (make contact)

1) Other terminal designations may be used if the arrangement and attribution of functions of the terminals comply with this specification.

2) When it is necessary to take polarity into consideration terminal 1 shall have plus and terminal 2 shall have minus.

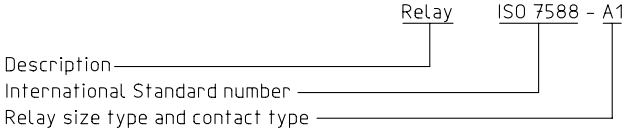
5.2 Functional allocation of flasher terminals

The functional allocation of flasher terminals is shown for information in annex B.

6 Designation

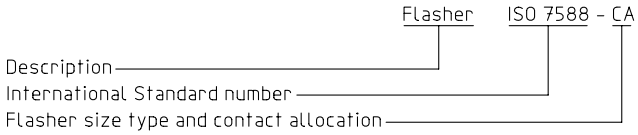
6.1 Relays in accordance with this part of ISO 7588 shall be designated as shown in the following example.

EXAMPLE



6.2 Flashers in accordance with this part of ISO 7588 shall be designated as shown in the following example.

EXAMPLE



Annex A
(informative)

Dimensions of socket apertures

A.1 General

This annex is for information only, pending completion of current ISO work on dimensions of socket apertures. A definitive specification may be given in a future edition of this part of ISO 7588.

A.2 Dimensions of socket apertures

Socket apertures should accommodate the following tab positioning zones (see figure A.1):

— at entering plane: 7,3 mm × 1,6 mm;

— at throat: 6,7 mm × 1,0 mm.

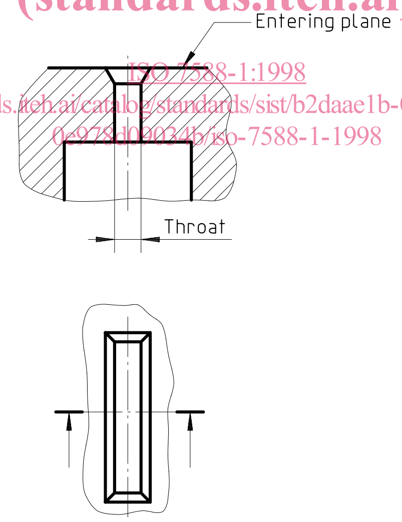


Figure A.1

Annex B
(informative)

Positioning and functional allocation of flasher terminals

B.1 Positioning of the terminals

The terminal positioning is shown in figure B.1 from the terminal connection side.

The terminal designation numbers which are used to show the functional allocation may be used for identification purposes.

Figure B.1

B.2 Functional allocation

The different terminal functional allocations of flasher unit systems are given in table B.1.