

INTERNATIONAL
STANDARD

ISO
8092-4

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**Road vehicles — Connections for on-board
electrical wiring harnesses —**

Part 4:

Pins for single- and multi-pole connections —
Dimensions and specific requirements

*Véhicules routiers — Connexions pour faisceaux de câblage électrique
embarqués —*

*Partie 4: Broches pour raccordements unipolaires et multipolaires —
Dimensions et exigences particulières*



Reference number
ISO 8092-4:1997(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 8092-4 was prepared by Technical Committee ISO/TC 22, *Road vehicles*, Subcommittee SC 3, *Electrical and electronic equipment*.

ISO 8092 consists of the following parts, under the general title *Road vehicles — Connections for on-board electrical wiring harnesses*:

- *Part 1: Tabs for single-pole connections — Dimensions and specific requirements*
- *Part 2: Definitions, test methods and general performance requirements*
- *Part 3: Tabs for multi-pole connections — Dimensions and specific requirements*
- *Part 4: Pins for single- and multi-pole connections — Dimensions and specific requirements*

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Road vehicles — Connections for on-board electrical wiring harnesses —

Part 4:

Pins for single- and multi-pole connections — Dimensions and specific requirements

1 Scope

This part of ISO 8092 specifies dimensions for the pins of single- and multi-pole connections and specific requirements, for on-board electrical wiring harnesses of road vehicles. It applies to connections designed to be disconnected after mounting in the vehicle in the case of repair and/or maintenance only.

2 Normative reference

The following standard contains provisions which, through reference in this text, constitute provisions of this part of ISO 8092. 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 8092 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 8092-2:1996, *Road vehicles — Connections for on-board electrical wiring harnesses — Part 2: Definitions, test methods and general performance requirements.*

3 Definitions

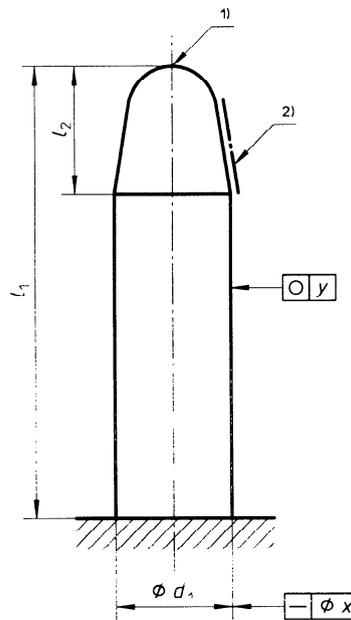
For the purposes of this part of ISO 8092, the definitions given in ISO 8092-2 apply.

4 Dimensional characteristics

Pins for single- and multi-pole connectors shall conform to the dimensions given in table 1 and figure 1.

If pins are stamped and formed, the usable contact area shall be specified and care shall be taken to assure that gaps and seams do not affect the contact performance.

Details not specified are left to the manufacturer's choice.



- 1) A flat area or a hole on the tip of max. $d_1/2$ is permitted.
- 2) This area may be convexly tapered and shall be smooth and burr free.

Figure 1 — Pin dimensions

Table 1 — Pin dimensions

Dimensions in millimetres

Dimension	Size ¹⁾								
	0,6	1	1,5	(1,6)	(2,12)	2,5	3	3,5	4
d_1	0,6	1	1,5	1,6	2,12	2,5	3	3,5	4
Tolerance on d_1	+0,01 -0,02			+0,02 -0,04				+0,03 -0,05	
l_1 min.	5		6		8			10	
l_2 max.	1	1,3	1,7		2,5			4	
l_2 min.	$d_1/4$								
x	0,03			0,06				0,08	
y	0,03			0,06				0,08	

1) Pin sizes in parentheses are not for new design.

5 Specific performance requirements

Single- and multi-pole connections shall be in conformity with the general performance requirements of ISO 8092-2.

Furthermore, the connection resistance of single- and multi-pole connections tested in accordance with ISO 8092-2:1996, subclause 4.8, shall meet the requirements in table 2.

Table 2 — Maximum permitted connection resistances

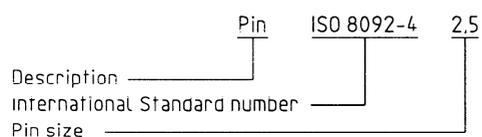
Pin size	Connection resistance		
	Initial mΩ max.	After endurance	
		Requirement 1 ¹⁾ mΩ max.	Requirement 2 ¹⁾ % of initial measured value max.
0,6 1 1,5 1,6	10	30	200
Remaining sizes	5	10	150

1) Requirement 1 and/or requirement 2 to be selected by supplier and user.

6 Designation

Pins in accordance with this part of ISO 8092 shall be designated as follows.

EXAMPLE



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