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**Internal combustion engines —  
Piston pins —**

**Part 1:  
General specifications**

*Moteurs à combustion interne — Axes de pistons —  
Partie 1: Spécifications générales*



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# Contents

	Page
<b>Foreword</b> .....	<b>iv</b>
<b>1 Scope</b> .....	<b>1</b>
<b>2 Terms and definitions</b> .....	<b>1</b>
2.1 General.....	1
2.2 Geometrical and manufacturing features of piston pins.....	1
<b>3 Symbols</b> .....	<b>2</b>
<b>4 Nomenclature</b> .....	<b>3</b>
4.1 Outside, inside and end features.....	3
4.2 Outside edge and inside chamfer configurations.....	6
4.3 Outside-edge drop-off configuration.....	8
<b>5 Codes</b> .....	<b>9</b>
<b>6 Designation of piston pins</b> .....	<b>10</b>
6.1 Designation elements and order.....	10
6.2 Designation examples.....	11
<b>7 Piston pin types, dimensions and tolerances</b> .....	<b>11</b>
7.1 Manufacturing types.....	11
7.2 Dimensions and tolerances.....	12
<b>8 Material and heat treatment</b> .....	<b>17</b>
8.1 Type of material.....	17
8.2 Core hardness / core strength.....	19
8.3 Carburised and nitrided case depth.....	19
8.4 Surface hardness.....	20
8.5 Volume change.....	20
<b>9 Common features</b> .....	<b>20</b>
9.1 Roughness of surfaces.....	20
9.2 Marking of piston pins.....	21
9.3 Miscellaneous.....	21
<b>10 Quality requirements</b> .....	<b>22</b>
10.1 Material characteristics.....	22
10.2 Material defects.....	22
10.3 Visual defects.....	23
<b>Bibliography</b> .....	<b>24</b>

## 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.

The procedures used to develop this document and those intended for its further maintenance are described in the ISO/IEC Directives, Part 1. In particular the different approval criteria needed for the different types of ISO documents should be noted. This document was drafted in accordance with the editorial rules of the ISO/IEC Directives, Part 2. [www.iso.org/directives](http://www.iso.org/directives)

Attention is drawn to the possibility that some of the elements of this document may be the subject of patent rights. ISO shall not be held responsible for identifying any or all such patent rights. Details of any patent rights identified during the development of the document will be in the Introduction and/or on the ISO list of patent declarations received. [www.iso.org/patents](http://www.iso.org/patents)

Any trade name used in this document is information given for the convenience of users and does not constitute an endorsement.

The committee responsible for this document is ISO/TC 22, *Road vehicles*.

This second edition cancels and replaces the first edition (ISO 18669-1:2004), which has been technically revised.

ISO 18669 consists of the following parts, under the general title *Internal combustion engines — Piston pins*:

- *Part 1: General specifications*
- *Part 2: Inspection measuring principles*

# Internal combustion engines — Piston pins —

## Part 1: General specifications

### 1 Scope

This part of ISO 18669 specifies the essential dimensional characteristics of piston pins with an outer diameter between 8 mm and 100 mm, for reciprocating internal combustion engines for road vehicles and other applications. In addition, it establishes a vocabulary, a pin-type classification, material description based on mechanical properties, common features and quality requirements.

The use of this part of ISO 18669 may require a manufacturer and customer statistical process control agreement.

### 2 Terms and definitions

For the purposes of this document, the following terms and definitions apply.

#### 2.1 General

##### 2.1.1

##### **piston pin**

precision cylindrical component that connects the piston to the connecting rod and has a smooth hard peripheral surface

#### 2.2 Geometrical and manufacturing features of piston pins

##### 2.2.1 Bore types

###### 2.2.1.1

###### **cylindrical**

pin having a straight cylindrical bore

###### 2.2.1.2

###### **centre web**

pin inside diameter formed symmetrically from each end leaving a web in the pin centre

Note 1 to entry: The web is subsequently removed leaving a step as shown in [Figure 3](#).

###### 2.2.1.3

###### **tapered**

pin with conical-shaped inside diameter near the ends that reduces the weight of the piston pin

###### 2.2.1.4

###### **machined**

pin with inside diameter produced solely by machining

###### 2.2.1.5

###### **seamless drawn tube**

hollow steel product which does not contain any line junctures resulting from the method of manufacture