BS ISO 6622-2:2013

BSI Standards Publication

Internal combustion engines — Piston rings

Part 2: Rectangular rings made of steel

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National foreword

This British Standard is the UK implementation of ISO 6622-2:2013. It supersedes BS ISO 6622-2:2003 which is withdrawn.

The UK participation in its preparation was entrusted to Technical Committee MCE/14/-/10, RIC engines - Cylinders, pistons and rings.

A list of organizations represented on this committee can be obtained on request to its secretary.

This publication does not purport to include all the necessary provisions of a contract. Users are responsible for its correct application.

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Compliance with a British Standard cannot confer immunity from legal obligations.

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Internal combustion engines — Piston rings —

Part 2: Rectangular rings made of steel

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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

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

This second edition cancels and replaces the first edition (ISO 6622-2:2003), which has been technically revised.

ISO 6622 consists of the following parts, under the general title *Internal combustion engines — Piston rings*:

— *Part 1: Rectangular rings made of cast iron*

— *Part 2: Regular rings made of steel*

Introduction

The ISO 6622 series is one of a number of series of International Standards dealing with piston rings for reciprocating internal combustion engines. Others are ISO 6621,[2] [3] [4] [5] ISO 6623,[6] ISO 6624,[7] [8] [9] [10] ISO 6625, ISO 6626,[12] [13] [14] and ISO 6627[15] (see Bibliography for details).

The common features and dimensional tables presented in this part of ISO 6622 constitute a broad range of variables and, in selecting a particular ring type, the designer must bear in mind the conditions under which it will be required to operate.

It is also essential that the designer refer to the specifications and requirements of ISO 6621-3[4] and ISO 6621-4[16] before completing his selection.

INTERNATIONAL STANDARD ISO 6622-2:2013(E)

Internal combustion engines — Piston rings —

Part 2: Rectangular rings made of steel

1 Scope

This part of ISO 6622 specifies the essential dimensional features of rectangular rings made of steel, types R, B, BA, and M having nominal diameters from 30 mm up to and including 160 mm, used in reciprocating internal combustion piston engines for road vehicles and other applications.

2 Normative references

The following documents, in whole or in part, are normatively referenced in this document and are indispensable for its application. For dated references, only the edition cited applies. For undated references, the latest edition of the referenced document (including any amendments) applies.

Not applicable.

3 Overview

The rectangular ring types are specified in Tables 1 to 5 and Figures 1 to 6. Their common features and the dimensions of those features are specified in Tables 6 to 11 and Figures 7 to 22. Tables 12 and 13 give the force factors for the different ring types, while Table 13 gives the dimensions and forces of the rectangular rings.

4 Ring types and designation examples

4.1 Type R — Straight-faced rectangular ring

4.1.1 General features

Figure 1 shows the general features of piston ring type R.

See Table 13 for dimensions and forces.