

This is a preview of "ISO 6622-2:2013". [Click here to purchase the full version from the ANSI store.](#)

Second edition
2013-11-01

Internal combustion engines — Piston rings —

Part 2: Rectangular rings made of steel

*Moteurs à combustion interne — Segments de piston —
Partie 2: Segments rectangulaires en acier*



Reference number
ISO 6622-2:2013(E)

© ISO 2013



COPYRIGHT PROTECTED DOCUMENT

© ISO 2013

All rights reserved. Unless otherwise specified, no part of this publication may be reproduced or utilized otherwise in any form or by any means, electronic or mechanical, including photocopying, or posting on the internet or an intranet, without prior written permission. Permission can be requested from either ISO at the address below or ISO's member body in the country of the requester.

ISO copyright office
Case postale 56 • CH-1211 Geneva 20
Tel. + 41 22 749 01 11
Fax + 41 22 749 09 47
E-mail copyright@iso.org
Web www.iso.org

Published in Switzerland

This is a preview of "ISO 6622-2:2013". [Click here to purchase the full version from the ANSI store.](#)

Contents

	Page
Foreword	iv
Introduction	v
1 Scope	1
2 Normative references	1
3 Overview	1
4 Ring types and designation examples	1
4.1 Type R — Straight-faced rectangular ring.....	1
4.2 Type B — Barrel-faced rectangular ring.....	2
4.3 Type BA — Asymmetrical barrel-faced rectangular ring, $h_1 \geq 1,2\text{mm}$	4
4.4 Type M — Taper-faced rectangular ring.....	5
5 Common features	6
5.1 Type R — Straight-faced rectangular ring.....	6
5.2 Type B — Barrel-faced rectangular ring.....	7
5.3 Type BA — Asymmetrical barrel-faced rectangular ring, $h_1 \geq 1,2\text{ mm}$	8
5.4 Type M — Taper-faced rectangular ring.....	9
5.5 Type R, B, BA, and M rings (positive twist type) — Internal bevel top side.....	11
5.6 Type M rings (negative twist type), taper M3 to M5 — Internal bevel bottom side.....	11
5.7 Type R, B, BA, and M rings — Outside and inside rounded edges.....	12
5.8 Type R, B, BA, and M rings (fully faced and inlaid) — Plating/coating thickness.....	12
5.9 Type R, B, BA, and M rings — Nitrided case depth.....	13
6 Force factors	14
7 Dimensions and forces	14
Bibliography	21

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

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

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 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*

This is a preview of "ISO 6622-2:2013". [Click here to purchase the full version from the ANSI store.](#)

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.