

Second edition  
2001-08-01

---

---

**Internal combustion engines —  
Piston rings —  
Part 1:  
Keystone rings made of cast iron**

*Moteurs à combustion interne — Segments de piston —  
Partie 1: Segments trapézoïdaux en fonte*



Reference number  
ISO 6624-1:2001(E)

This is a preview of "ISO 6624-1:2001". [Click here to purchase the full version from the ANSI store.](#)

**PDF disclaimer**

This PDF file may contain embedded typefaces. In accordance with Adobe's licensing policy, this file may be printed or viewed but shall not be edited unless the typefaces which are embedded are licensed to and installed on the computer performing the editing. In downloading this file, parties accept therein the responsibility of not infringing Adobe's licensing policy. The ISO Central Secretariat accepts no liability in this area.

Adobe is a trademark of Adobe Systems Incorporated.

Details of the software products used to create this PDF file can be found in the General Info relative to the file; the PDF-creation parameters were optimized for printing. Every care has been taken to ensure that the file is suitable for use by ISO member bodies. In the unlikely event that a problem relating to it is found, please inform the Central Secretariat at the address given below.

© ISO 2001

All rights reserved. Unless otherwise specified, no part of this publication may be reproduced or utilized in any form or by any means, electronic or mechanical, including photocopying and microfilm, without permission in writing 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.ch](mailto:copyright@iso.ch)  
Web [www.iso.ch](http://www.iso.ch)

Printed in Switzerland

This is a preview of "ISO 6624-1:2001". [Click here to purchase the full version from the ANSI store.](#)

## Contents

	Page
Foreword.....	iv
Introduction .....	v
1 Scope .....	1
2 Normative reference .....	1
3 Overview .....	1
4 Ring types and designation examples .....	2
4.1 Type T — Straight faced keystone ring 6° .....	2
4.2 Type TB — Symmetrical barrel faced keystone ring 6° .....	4
4.3 Type TBA — Asymmetrical barrel faced keystone ring 6° .....	6
4.4 Type TM — Taper faced keystone ring 6° .....	8
4.5 Type K — Straight faced keystone ring 15° .....	9
4.6 Type KB — Symmetrical barrel faced keystone ring 15° .....	10
4.7 Type KBA — Asymmetrical barrel faced keystone ring 15° .....	11
4.8 Type KM — Taper faced keystone ring 15° .....	12
5 Common features .....	13
5.1 Type T, TB, TBA, TM, K, KB, KBA, KM rings — Inside chamfered edges (KI).....	13
5.2 Type T, TB, TBA, TM, K, KB, KBA, KM rings (positive twist type) internal bevel or internal step top side .....	13
5.3 Type TM or KM rings with partly cylindrical machined (LM) or lapped (LP) peripheral surface.....	14
5.4 Type T, TB, TBA, TM, K, KB, KBA, KM rings — Plating/coating configuration.....	15
6 Force Factors .....	17
7 Dimensions.....	18
Bibliography .....	26

## 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.

International Standards are drafted in accordance with the rules given in the ISO/IEC Directives, Part 3.

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.

Attention is drawn to the possibility that some of the elements of this part of ISO 6624 may be the subject of patent rights. ISO shall not be held responsible for identifying any or all such patent rights.

International Standard ISO 6624-1 was prepared by Technical Committee ISO/TC 22, *Road vehicles*.

This second edition cancels and replaces the first edition (ISO 6624-1:1986), which has been technically revised.

ISO 6624 consists of the following parts, under the general title *Internal combustion engines — Piston rings*:

- *Part 1: Keystone rings made of cast iron*
- *Part 2: Half keystone rings made of cast iron*
- *Part 3: Keystone rings made of steel*
- *Part 4: Half keystone rings made of steel*

This is a preview of "ISO 6624-1:2001". [Click here to purchase the full version from the ANSI store.](#)

## Introduction

ISO 6624 is one of a number of series of International Standards dealing with piston rings for reciprocating internal combustion engines. Others are ISO 6621, ISO 6622, ISO 6623, ISO 6625, ISO 6626 and ISO 6627 (see Bibliography for details).

The common features and dimensional tables presented in this part of ISO 6624 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<sup>[4]</sup> and ISO 6621-4 before completing a selection.