
**Belt drives — Narrow V-belts for the
automotive industry — Fatigue test**

*Transmissions par courroies — Transmissions par courroies
trapézoïdales étroites pour la construction automobile — Essai de
fatigue*



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.

This document is a preview generated by EVS

© ISO 2003

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.org
Web www.iso.org

Published in Switzerland

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 2.

The main task of technical committees is to prepare International Standards. 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 document may be the subject of patent rights. ISO shall not be held responsible for identifying any or all such patent rights.

ISO 5287 was prepared by Technical Committee ISO/TC 41, *Pulleys and belts (including veebelts)*, Subcommittee SC 1, *Friction*.

This third edition cancels and replaces the second edition (ISO 5287:1985), which has been technically revised.

This document is a preview generated by EVS

Belt drives — Narrow V-belts for the automotive industry — Fatigue test

1 Scope

This International Standard specifies a fatigue test for the quality control of narrow V-belts (sections AV 10 and AV 13) intended for driving the auxiliaries of internal combustion engines used for automotive purposes.

NOTE The dimensional characteristics of these belts and of the corresponding pulleys are the subject of ISO 2790.

2 Normative references

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

ISO 683-1, *Heat-treatable steels, alloy steels and free-cutting steels — Part 1: Direct-hardening unalloyed and low-alloyed wrought steel in form of different black products*

ISO 2790, *Belt drives — V-belts for the automotive industry and corresponding pulleys — Dimensions*

ISO 4287, *Geometrical Product Specifications (GPS) — Surface texture: Profile method — Terms, definitions and surface texture parameters*

ISO 6508-1, *Metallic materials — Rockwell hardness test — Part 1: Test method (scales A, B, C, D, E, F, G, H, K, N, T)*

3 Principle

Determination of the performance of a belt under specified conditions on the two- or three-pulley test machine described in 4.1.

NOTE The shortest V-belt that can be tested on the three-pulley test machine is approximately 800 mm. Shorter belts should be tested on the two-pulley test machine, as described in Clauses 4 and 6.

A number of conditions shall be agreed between the manufacturer and the user, including the power to be transmitted, the effective diameter of the idler pulley and the number of times the belt can be re-tensioned, and the minimum acceptable belt life, in hours.

As a general rule, the power to be transmitted using the two-pulley test machine shall be approximately 70 % of the power transmitted using the three-pulley test machine.

Belt failure occurs when the belt no longer satisfies the agreed conditions.