INTERNATIONAL STANDARD

ISO 21342

First edition
2019-05

Synchronous belt drives — Automotive belts and pulleys

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Reference number
ISO 21342:2019(E)

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Published in Switzerland

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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 (see www.iso.org/directives).

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For an explanation of the voluntary nature of standards, the meaning of ISO specific terms and expressions related to conformity assessment, as well as information about ISO's adherence to the World Trade Organization (WTO) principles in the Technical Barriers to Trade (TBT) see www.iso.org/iso/foreword.html.

This document was prepared by Technical Committee ISO/TC 41, *Pulleys and belts (including vee belts),* Subcommittee SC 4, *Synchronous belt drives.*

Any feedback or questions on this document should be directed to the user's national standards body. A complete listing of these bodies can be found at www.iso.org/members.html.

This first edition of ISO 21342 cancels and replaces ISO 9010:1997 and ISO 9011:1997.

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1 Scope

This document specifies the characteristics of synchronous endless belts and their related pulleys for use in automotive applications such as engine camshaft drives.

The characteristics include:

— belt pitch spacing;

— belt nominal tooth dimensions;

— belt width and width tolerance;

— belt pitch length and pitch length tolerance;

— pulley groove dimensions and tolerances;

— pulley tolerances and quality specifications.

Test methods for measuring belt pitch length and lateral runout are also included.

2 Normative reference

The following documents are referred to in the text in such a way that some or all of their content constitutes requirements 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 254, *Belt drives — Pulleys — Quality, finish and balance*

3 Terms and definitions

No terms and definitions are listed in this document.

ISO and IEC maintain terminological databases for use in standardization at the following addresses:

— ISO Online browsing platform: available at https://www.iso.org/obp.

— IEC Electropedia: available at http://www.electropedia.org/

4 Profiles

The following profiles for synchronous drives for automotive applications are standardized:

— type ZA: trapezoidal tooth;

— type ZB: trapezoidal tooth;

— type ZH: curvilinear tooth, "H" system;

— type YH: curvilinear tooth, "H" system;

— type ZR: curvilinear tooth, "R" system;

— type YR: curvilinear tooth, "R" system;

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