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Synchronous belt drives — Automotive belts — Determination of physical properties

Transmissions synchrones par courroies — Courroies pour la construction automobile — Détermination des caractéristiques physiques

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Foreword

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

This third edition cancels and replaces the second edition (ISO 12046:2012), which has been technically revised.

The main changes are as follows:

— Clause 2 has been updated;

— volumetric units have been clarified (7.9.2).

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.

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Synchronous belt drives — Automotive belts — Determination of physical properties

1 Scope

This document specifies test methods for determining the physical properties of synchronous belts used in driving engine parts, such as camshafts, fuel injection pumps, balancing shafts. These test methods are intended to provide a means of characterizing synchronous belt properties for belts which are evaluated and qualified by dynamic laboratory and field testing.

2 Normative references

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 48-2, *Rubber, vulcanized or thermoplastic — Determination of hardness — Part 2: Hardness between 10 IRHD and 100 IRHD*

ISO 1817, *Rubber, vulcanized or thermoplastic — Determination of the effect of liquids*

ISO 5288,, *Synchronous belt drives — Vocabulary*

3 Terms and definitions

For the purposes of this document, the terms and definitions given in ISO 5288 apply.

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

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

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

4 Principle

The objective of the test methods covered in this document is the evaluation of the physical properties of automotive synchronous belts through standardized testing. These test methods are independent of tooth profiles.

5 Test methods

The tests covered in this document are listed in Table 1.

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