BS ISO 1813:2014

BSI Standards Publication

Belt drives — V-ribbed belts, joined V-belts and V-belts including wide section belts and hexagonal belts — Electrical conductivity of antistatic belts: Characteristics and methods of test

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National foreword

This British Standard is the UK implementation of ISO 1813:2014.

The 2014 revision of ISO 1813 includes criteria and a test method for the antistatic property of the backside, flat surface of V-ribbed belts. The UK committee believes that this test method applies only to those belts intended for use on drive systems that incorporate either backside driven pulleys, or backside idlers. For belts intended for use solely with grooved inside pulleys (i.e. driving surfaces on the rib side only) there is no requirement for anti-static property on the backside surface. Such belts may not necessarily meet the criteria for the maximum electrical resistance on the back surface, as outlined in Table 4.

The UK participation in its preparation was entrusted to Technical Committee MCE/10, Belts & Pulley Drive.

A list of organizations represented on this committee can be obtained on request to its secretary.

This publication does not purport to include all the necessary provisions of a contract. Users are responsible for its correct application.

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Belt drives — V-ribbed belts, joined V-belts and V-belts including wide section belts and hexagonal belts — Electrical conductivity of antistatic belts: Characteristics and methods of test

Transmissions par courroies — Courroies striées, courroies trapézoïdales simples et jumelées y compris celles à section large et hexagonales — Conductibilité électrique des courroies anti-électrostatiques: Spécifications et méthodes d'essai

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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 on the meaning of ISO specific terms and expressions related to conformity assessment, as well as information about ISO's adherence to the WTO principles in the Technical Barriers to Trade (TBT) see the following URL: Foreword - Supplementary information

The committee responsible for this document is ISO/TC 41, *Pulleys and belts (including veebelts)*, Subcommittee SC 1, *Friction*.

This fourth edition cancels and replaces the third edition (ISO 1813:1998), which has been technically revised.

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INTERNATIONAL STANDARD ISO 1813:2014(E)

Belt drives — V-ribbed belts, joined V-belts and V-belts including wide section belts and hexagonal belts — Electrical conductivity of antistatic belts: Characteristics and methods of test

1 Scope

This International Standard specifies the maximum electrical resistance of antistatic endless V-ribbed belts, joined V-belts, and single V-belts including wide section belts and hexagonal belts, as well as corresponding production control and individual proof methods of measurements.

The application of this International Standard is limited to new belts intended to be used in an explosive atmosphere or in situations where there is a fire risk. The test is intended to ensure that the belt is sufficiently conductive to dissipate charges of electricity which can form on it in service.

In case of a production control test, the decision is left to national standards or agreement between interested parties as to whether the test shall be carried out on each belt in a batch or on only a percentage of belts in a batch.

NOTE For each proof test, it is intended that the belt manufacturer determine which type of electrode and conductive coating material can be used.

2 Normative references

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

ISO 1604, *Belt drives — Endless wide V-belts for industrial speed-changers and groove profiles for corresponding pulleys*

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

ISO 3410, *Agricultural machinery — Endless variable-speed V-belts and groove sections of corresponding pulleys*

ISO 4183, *Belt drives — Classical and narrow V-belts — Grooved pulleys (system based on datum width)*

ISO 4184, *Belt drives — Classical and narrow V-belts — Lengths in datum system*

ISO 5289, *Agricultural machinery — Endless hexagonal belts and groove sections of corresponding pulleys*

ISO 5290, *Belt drives — Grooved pulleys for joined narrow V-belts — Groove sections 9N/J, 15N/J and 25N/J (effective system)*

ISO 5291, *Belt drives — Grooved pulleys for joined classical V-belts — Groove sections AJ, BJ, CJ and DJ (effective system)*

ISO 9981, *Belt drives — Pulleys and V-ribbed belts for the automotive industry — PK profile: Dimensions*

ISO 9982, *Belt drives — Pulleys and V-ribbed belts for industrial applications — PH, PJ, PK, PL and PM profiles: dimensions*

ISO 23529, *Rubber — General procedures for preparing and conditioning test pieces for physical test methods*

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