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

*Transmissions par courroies — Courroies trapézoïdales pour la
construction automobile et poulies correspondantes — Dimensions*

iTeh Standards
(<https://standards.iteh.ai>)
Document Preview

[ISO 2790:2020](https://standards.iteh.ai/catalog/standards/iso/f8bc356d-7913-4fd8-b9a0-15da6e346bca/iso-2790-2020)

<https://standards.iteh.ai/catalog/standards/iso/f8bc356d-7913-4fd8-b9a0-15da6e346bca/iso-2790-2020>



iTeh Standards
(<https://standards.iteh.ai>)
Document Preview

[ISO 2790:2020](https://standards.iteh.ai/catalog/standards/iso/f8bc356d-7913-4fd8-b9a0-15da6e346bca/iso-2790-2020)

<https://standards.iteh.ai/catalog/standards/iso/f8bc356d-7913-4fd8-b9a0-15da6e346bca/iso-2790-2020>



COPYRIGHT PROTECTED DOCUMENT

© ISO 2020

All rights reserved. Unless otherwise specified, or required in the context of its implementation, no part of this publication may be reproduced or utilized otherwise in any form or by any means, electronic or mechanical, including photocopying, or posting on the internet or an intranet, without prior written permission. Permission can be requested from either ISO at the address below or ISO's member body in the country of the requester.

ISO copyright office
CP 401 • Ch. de Blandonnet 8
CH-1214 Vernier, Geneva
Phone: +41 22 749 01 11
Fax: +41 22 749 09 47
Email: copyright@iso.org
Website: www.iso.org

Published in Switzerland

Contents

Page

Foreword	iv
1 Scope	1
2 Normative references	1
3 Terms and definitions	1
4 Belts	1
4.1 General.....	1
4.2 Cross-section.....	2
4.3 Measurement of the effective length of a belt and its ride-out.....	3
4.4 Centre distance variations.....	4
5 Service pulleys	5
5.1 General.....	5
5.2 Dimensions.....	5
5.3 Checking of effective diameter.....	7
5.4 Designation.....	8
Bibliography	9

iTeh Standards
(<https://standards.itih.ai>)
Document Preview

[ISO 2790:2020](https://standards.itih.ai/catalog/standards/iso/f8bc356d-7913-4fd8-b9a0-15da6e346bca/iso-2790-2020)

<https://standards.itih.ai/catalog/standards/iso/f8bc356d-7913-4fd8-b9a0-15da6e346bca/iso-2790-2020>

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).

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. Details of any patent rights identified during the development of the document will be in the Introduction and/or on the ISO list of patent declarations received (see www.iso.org/patents).

Any trade name used in this document is information given for the convenience of users and does not constitute an endorsement.

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 veebelts)*, Subcommittee SC 1, *Friction*.

This fifth edition cancels and replaces the fourth edition (ISO 2790:2004), which has been technically revised. The main changes compared to the previous edition are as follows:

- the cogged type has been added throughout the document;
- the symmetry of the groove has been changed from $(90 \pm 2)^\circ$ to $(90 \pm 0,5)^\circ$ in [Table 4](#), as in ISO 9981;
- the designation of belt has been added.

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.

Belt drives — V-belts for the automotive industry and corresponding pulleys — Dimensions

1 Scope

This document specifies the requirements for belts and pulleys for V-belt drives used for driving auxiliaries of internal combustion engines for the automotive industry.

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 1081, *Belt drives — V-belts and V-ribbed belts, and corresponding grooved pulleys — Vocabulary*

3 Terms and definitions

For the purposes of this document, the terms and definitions given in ISO 1081 apply.

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 Belts

[ISO 2790:2020](https://standards.iteh.ai/catalog/standards/iso/f8bc356d-7913-4fd8-b9a0-15da6e346bca/iso-2790-2020)

<https://standards.iteh.ai/catalog/standards/iso/f8bc356d-7913-4fd8-b9a0-15da6e346bca/iso-2790-2020>

4.1 General

A belt is defined by its cross-section, type and by its effective length in millimetres measured under specified conditions. Cogged belt is represented by X.

Belt types are given in [Figure 1](#).

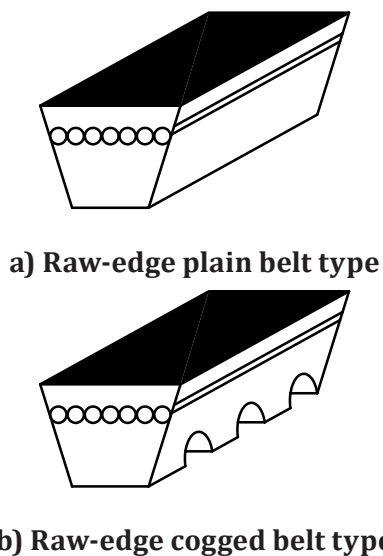


Figure 1 — Belt type

4.2 Cross-section

A cross-section of a belt is defined by the nominal top width, w (see Figure 2 and Table 1).

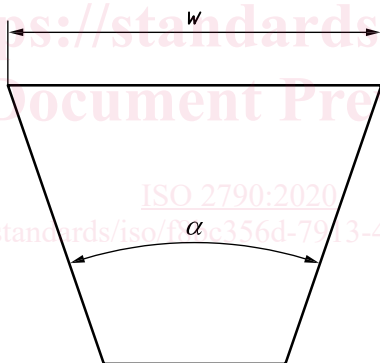


Figure 2 — Profile of the belt

Table 1 — Dimensions of belt cross-sections

Dimensions in millimetres

Parameter	Symbol	Cross section					
		AV 10 Plain type	AV 10X Cogged type	AV 13 Plain type	AV 13X Cogged type	AV 17 Plain type	AV 17X Cogged type
Nominal top width	w	10	10	13	13	17	17
Belt angle ^a	α (°)	40	40	40	40	40	40

^a Belt angle can be changed if agreed otherwise between customer and belt manufacturer.