Second edition 2018-10

Road vehicles — Anchorages in vehicles and attachments to anchorages for child restraint systems —

Part 3:

Classification of child restraint system and space in vehicle

Véhicules routiers — Ancrages dans les véhicules et attaches aux ancrages pour systèmes de retenue pour enfants —

Partie 3: Classification des dimensions des retenues pour enfants et espace dans le véhicule



ISO 13216-3:2018(E)

This is a preview of "ISO 13216-3:2018". Click here to purchase the full version from the ANSI store.



COPYRIGHT PROTECTED DOCUMENT

© ISO 2018

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

COI	itent	S	Page
Fore	word		iv
Intro	ductio	n	v
1	Scope	e	1
2	•	native references	
3		ns and definitions	
4			
4	4.1	cle space requirementsSpace required in a vehicle to accommodate specified types and installation	Z
	11.1	modes of child restraint systems	2
		4.1.1 General	
		4.1.2 Mass of CRF	
		4.1.3 Installation and assessment using virtual tools and procedures	
	4.2	Space required for full-height forward-facing toddler child restraint systems	3
	4.3	Space required for reduced-height forward-facing toddler child restraint systems	3
	4.4	Space required for reduced-height forward-facing toddler child restraint systems	
		having a reduced contour in the upper part, and an extended seatback upper part	
	4.5	Space required for full-size rearward-facing toddler child restraint systems	
	4.6	Space required for reduced-size rearward-facing toddler child restraint systems	
	4.7	Space required for rearward-facing infant child restraint systems	
	4.8	Space required for lateral-facing infant child restraint system (carry-cot)	
	4.9	Space required for booster seat and booster cushion	13
		4.9.1 Purpose of the booster system envelopes for determination of space and	4.0
		seat belt alignment in vehicles	
		4.9.2 Installation requirements	
		4.9.3 Belt routing requirements 4.9.4 Installation with ISOFIX support	
		4.9.5 Installation without ISOFIX support	
5		**	
		ensions of child restraint system	18
	5.1	Maximum dimensions of child restraint systems	18
	5.2	Full-height forward-facing toddler child restraint system	18
	5.3	Reduced-height forward-facing toddler child restraint systemReduced-height forward-facing toddler child restraint systems with a reduced	18
	5.4	contour in the upper part, and an extended seatback upper part	10
	5.5	Full-size rearward-facing toddler child restraint system	
	5.6	Reduced-size rearward-facing toddler child restraint system	
	5.7	Rearward-facing infant child restraint systems	
	5.8	Lateral-facing infant child restraint systems	
	5.9	Booster seat and booster cushion restraint systems	
	0.7	5.9.1 Purpose of the booster system envelopes with regard to child restraint systems	
		5.9.2 Maximum dimensional requirements	19 10
		5.9.3 Booster with ISOFIX additional requirements	
	5.10	Procedure for checking CRS compliance with CRF	
	5.11	Installation and assessment using virtual tools and procedures	
6		sification system	
		formative) Marking of vehicle seating positions and child restraint systems	
	_	formative) Drawings and tools	
Bibliography			
	-9-~P	· J	

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 on 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 the following URL: www.iso.org/iso/foreword.html.

This document was prepared by Technical Committee ISO/TC 22, *Road vehicles*, Subcommittee SC 36.

This second edition cancels and replaces the first edition (ISO 13216-3:2006), which has been technically revised.

The main changes compared to the previous edition are as follows:

- Addition of booster system envelopes ISO/B3, ISO/B2 and ISO/B1;
- Addition of envelope ISO/R2X (modified version of ISO/R2 to provide improved compatibility with the vehicle interior);
- Improved version of the lateral facing envelope (ISO/L1 and ISO/L2):
- Dashed line in seatback area of the ISO/R series of envelopes;
- Corrections in the following envelope drawings: Figures 3, 5 and 7; and
- Addition of recommended CRF masses (<u>Table 1</u>).

A list of all parts in the ISO 13216 series can be found on the ISO website.

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.

Introduction

The basic ISOFIX standard ISO 13216-1 provides requirements needed for positioning of the seat bight anchorages, the geometry around anchorage points and, to some extent, dimensional requirements for forward-facing child restraint systems.

In order to ensure that a child restraint system fits in a vehicle, it is also essential that the vehicle interior and the child restraint system match each other spatially. This document provides requirements for the space needed in vehicles to accommodate child restraints of different types and sizes.

Not all vehicles on the market are capable of accommodating the largest child restraint systems. This document thus provides a classification system to help in judging which types and sizes of child restraint systems will fit in the vehicle. Three size classes of forward-facing systems and three size classes of rearward-facing systems are provided. Two classes of lateral-facing systems are included (dimensionally revised in this second edition). This second edition also incorporates booster system envelopes for size classification of booster systems.

A suggested marking of the space available for the respective child restraint positions in the vehicle, and for the child restraint system dimensions, is included in this document to help consumers choose a child restraint system that is dimensionally suitable for their vehicle. This information is shown in informative $\underline{Annex\ A}$.