

INTERNATIONAL  
STANDARD

ISO  
19377

First edition  
2017-11

---

---

---

**Heavy commercial vehicles and  
buses — Emergency braking on a  
defined path — Test method for  
trajectory measurement**

*Véhicules utilitaires lourds et autobus — Freinage d'urgence sur un  
passage défini — Méthodes d'essai pour la mesure de trajectoire*



Reference number  
ISO 19377:2017(E)

© ISO 2017



## **COPYRIGHT PROTECTED DOCUMENT**

© ISO 2017, Published in Switzerland

All rights reserved. Unless otherwise specified, 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  
Ch. de Blandonnet 8 • CP 401  
CH-1214 Vernier, Geneva, Switzerland  
Tel. +41 22 749 01 11  
Fax +41 22 749 09 47  
[copyright@iso.org](mailto:copyright@iso.org)  
[www.iso.org](http://www.iso.org)

# Contents

	Page
<b>Foreword</b>	<b>iv</b>
<b>Introduction</b>	<b>v</b>
<b>1 Scope</b>	<b>1</b>
<b>2 Normative references</b>	<b>1</b>
<b>3 Terms and definitions</b>	<b>1</b>
<b>4 Principle</b>	<b>2</b>
<b>5 Variables</b>	<b>2</b>
<b>6 Measuring equipment</b>	<b>3</b>
<b>7 Test conditions</b>	<b>3</b>
7.1 General	3
7.2 Test track and ambient conditions	4
7.3 Test vehicle	4
7.3.1 General vehicle condition	4
7.3.2 Loading condition	4
7.3.3 Number of test runs	4
<b>8 Test methods</b>	<b>4</b>
8.1 Test method for braking straight ahead	4
8.1.1 Initial driving condition	4
8.1.2 Definition of the desired path and track	4
8.1.3 System intervention	5
8.2 Test method for braking in a constant radius curve	5
8.2.1 Initial driving condition	5
8.2.2 Definition of the desired path and track	5
8.2.3 System intervention	6
<b>9 Data evaluation and presentation of results</b>	<b>6</b>
9.1 General	6
9.2 Characteristic values	7
9.2.1 Maximum path deviation, $D_{P,max}$	7
9.2.2 Maximum rear axle path deviation, $D_{PR,max}$	7
9.2.3 Maximum trailer path deviation, $D_{PT,max}$	8
9.2.4 Deceleration at full braking	8
9.2.5 Maximum articulation angle(s) (optional)	8
9.2.6 Corrective steering action, $\delta_{H,C}$ (for closed-loop test)	8
9.2.7 Indication of leaving the desired track (optional)	8
<b>Annex A (normative) Test report — General data and test conditions</b>	<b>9</b>
<b>Annex B (informative) Example of test reports</b>	<b>10</b>
<b>Bibliography</b>	<b>12</b>