

Second edition
2020-07

Acoustics — Measurement of insertion loss of ducted silencers without flow — Laboratory survey method

Acoustique — Détermination de la perte d'insertion de silencieux en conduit sans écoulement — Méthode de contrôle en laboratoire



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

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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 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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This document was prepared by Technical Committee ISO/TC 43, *Acoustics*, Subcommittee SC 1, *Noise*.

This second edition cancels and replaces the first edition (ISO 11691:1995), which has been technically revised. The main changes compared to the previous edition are as follows:

- a modal filter has been inserted after the source to bring the standard more in line with the corresponding arrangements in ISO 7235:2003^[5], and
- in this edition, test ducts and test object should, if possible, have the same cross-sections.

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Introduction

The insertion loss of absorbent silencers is generally not affected by the air flow, provided that the flow velocity does not exceed approximately 20 m/s in the narrowest cross-section of the silencer. In practice, non-uniform flow distributions must be considered, therefore the limit velocity of 20 m/s corresponds to a design velocity of 10 m/s to 15 m/s.