

DIN EN 1793-6:2013-04 (E)

Road traffic noise reducing devices - Test method for determining the acoustic performance - Part 6: Intrinsic characteristics - In-situ values of airborne sound insulation under direct sound field conditions

Contents		Page
Foreword		3
Introduction		4
1	Scope	7
2	Normative references	7
3	Terms and definitions	7
4	Sound insulation index measurements	12
4.1	General principle	12
4.2	Measured quantity	12
4.3	Test arrangement	12
4.4	Measuring equipment	18
4.4.1	Components of the measuring system	18
4.4.2	Sound source	18
4.4.3	Test signal	18
4.5	Data processing	19
4.5.1	Calibration	19
4.5.2	Sample rate	19
4.5.3	Background noise	19
4.5.4	Scanning technique using a single microphone	19
4.5.5	Scanning technique using nine microphones	20
4.5.6	Adrienne temporal window	21
4.5.7	Placement of the Adrienne temporal window	22
4.5.8	Low frequency limit and sample size	23
4.6	Positioning of the measuring equipment	24
4.6.1	Selection of the measurement positions	24
4.6.2	Post measurements	25
4.6.3	Additional measurements	25
4.6.4	Reflecting objects	25
4.6.5	Safety considerations	25
4.7	Sample surface and meteorological conditions	25
4.7.1	Condition of the sample surface	25
4.7.2	Wind	25
4.7.3	Air temperature	25
4.8	Single-number rating	26
4.8.1	General	26
4.8.2	Acoustic elements	26
4.8.3	Posts	26
4.8.4	Global	27
5	Measurement uncertainty	27
6	Measuring procedure	27
7	Test report	28

Annex A (normative) Categorisation of single-number rating	30
Annex B (informative) Guidance note on use of the single-number rating	31
Annex C (informative) Measurement uncertainty	32
Annex D (informative) Template of test report on airborne sound insulation of road traffic noise reducing devices	35
Bibliography	47