

# DIN EN ISO 14509-1:2017-02 (E)

**Small craft - Airborne sound emitted by powered recreational craft - Part 1: Pass-by measurement procedures (ISO 14509-1:2008)**

---

Contents	Page
<b>Foreword .....</b>	<b>3</b>
1 <b>Scope .....</b>	4
2 <b>Normative references .....</b>	4
3 <b>Terms and definitions .....</b>	4
4 <b>Symbols .....</b>	7
5 <b>Measurement quantity .....</b>	7
6 <b>Measurement uncertainty .....</b>	7
7 <b>Measuring equipment .....</b>	8
8 <b>Test site specifications and environmental conditions .....</b>	8
9 <b>Test course, microphone positions and measurement distance .....</b>	9
10 <b>Operating conditions .....</b>	11
11 <b>Test procedure .....</b>	12
12 <b>Test report .....</b>	12
13 <b>Standard craft specifications for outboard motor type tests according to Clause 10 .....</b>	13
14 <b>Standard craft specifications for type tests for stern drives with integral exhaust systems according to Clause 10 .....</b>	14
<b>Annex A (normative) Measurement of the sound exposure level .....</b>	<b>15</b>
<b>Annex B (informative) Example of test report form .....</b>	<b>19</b>
<b>Bibliography .....</b>	<b>21</b>
<b>Figures</b> <b>Figure 1 -- Position of the microphone and test course .....</b>	<b>10</b>
<b>Figure 2 -- Microphone position and heights .....</b>	10
<b>Tables</b> <b>Table 1 -- Standard deviation of reproducibility of individual sources of measurement .....</b>	7
<b>Table 2 -- Variability for a coverage probability of 90 % .....</b>	7
<b>Table 3 -- Correction for background sound pressure level, L<sub>pAS</sub>, for monitoring tests .....</b>	9
<b>Table 4 -- Standard craft specifications .....</b>	13
<b>Table 5 -- Standard craft specifications for petrol engines .....</b>	14

<b>Table 6 -- Standard craft specifications for diesel engines .....</b>	<b>14</b>
<b>Table A.1 -- Standard deviation of reproducibility of individual sources of measurement .....</b>	<b>15</b>
<b>Table A.2 -- Variability for a coverage probability of 90 % .....</b>	<b>16</b>
<b>Table A.3 -- Correction for background sound exposure level, LAE, for monitoring tests .....</b>	<b>17</b>