

# DIN EN 13718-1:2014-12 (E)

## Medical vehicles and their equipment - Air ambulances - Part 1: Requirements for medical devices used in air ambulances

---

<b>Contents</b>		<b>Page</b>
Foreword .....		3
Introduction .....		4
<b>1</b>	<b>Scope .....</b>	<b>5</b>
<b>2</b>	<b>Normative references .....</b>	<b>5</b>
<b>3</b>	<b>Terms and definitions .....</b>	<b>6</b>
<b>4</b>	<b>Requirements for medical devices for air ambulances .....</b>	<b>6</b>
4.1	General .....	6
4.2	Patient and personnel safety .....	7
4.3	User interface .....	7
4.4	Environmental conditions and performance of medical devices intended for use in air ambulances .....	7
4.4.1	Functional temperature range .....	7
4.4.2	Humidity .....	8
4.4.3	Variable atmospheric pressures .....	8
4.5	Electrically-powered medical devices .....	8
4.5.1	General .....	8
4.5.2	Medical devices with 12 V DC power input .....	8
4.5.3	Medical devices with 24 V DC power input .....	8
4.5.4	Medical devices with 230 V AC power input .....	9
4.5.5	Short time voltage drop .....	9
4.5.6	Internal electrical power source .....	9
4.5.7	Electromagnetic interference of medical devices .....	9
4.6	Medical gas supply .....	9
4.6.1	General .....	9
4.6.2	Gas leakage .....	9
4.6.3	Pressure regulators and flow metering devices .....	9
4.6.4	Pneumatic power .....	10
4.6.5	Cylinder valves .....	10
4.6.6	Low pressure hose assemblies .....	10
4.7	Mechanical strength .....	10
4.7.1	General .....	10
4.7.2	Vibration and bump .....	10
4.7.3	Free fall .....	10
4.8	Fixation of medical devices in air ambulances .....	10
4.9	Fire resistance .....	10
4.10	Information to be supplied by the manufacturer .....	11
<b>5</b>	<b>Test methods .....</b>	<b>11</b>
5.1	General .....	11
5.2	Ambient conditions .....	11
5.3	Test method for durability of markings and colour coding .....	11
5.4	Free fall .....	11
<b>Annex ZA (informative)</b>	<b>Relationship between this European Standard and the Essential Requirements of EU Directive 93/42/EEC on Medical Devices .....</b>	<b>13</b>
<b>Bibliography .....</b>		<b>15</b>