

# DIN ISO 5348:2022-05 (E)

## Mechanical vibration and shock - Mechanical mounting of accelerometers (ISO 5348:2021)

---

<b>Contents</b>		<b>Page</b>
<b>National foreword</b>	.....	<b>3</b>
<b>National Annex NA (informative) Bibliography</b>	.....	<b>4</b>
<b>Foreword</b>	.....	<b>5</b>
<b>Introduction</b>	.....	<b>6</b>
<b>1 Scope</b>	.....	<b>7</b>
<b>2 Normative references</b>	.....	<b>7</b>
<b>3 Terms and definitions</b>	.....	<b>7</b>
<b>4 Basics</b>	.....	<b>7</b>
<b>5 Characteristics to be specified by manufacturers of accelerometers</b>	.....	<b>10</b>
<b>6 Considerations for selecting a mounting method</b>	.....	<b>10</b>
6.1 General considerations	.....	10
6.1.1 Procedures	.....	10
6.1.2 Conditions	.....	10
6.2 Specific considerations	.....	11
6.2.1 Frequency range of operation	.....	11
6.2.2 Transducer cable	.....	11
6.3 Determination of the mounted fundamental resonance frequency	.....	12
6.3.1 General	.....	12
6.3.2 Vibration excitation method	.....	12
6.3.3 Shock excitation methods	.....	13
6.4 Recommendations for particular types of mountings	.....	14
6.4.1 General	.....	14
6.4.2 Stud mounting	.....	15
6.4.3 Adhesive mounting	.....	16
6.4.4 Magnets	.....	19
6.4.5 Quick mount	.....	19
6.4.6 Probe	.....	20
6.4.7 Conical bolting	.....	20
6.4.8 Low-percussion mounting devices for recording human exposure to vibration	.....	21
6.4.9 Mounting by three-point support and ground spikes	.....	21
6.4.10 Wedge anchors	.....	21
6.4.11 Mounting fixtures	.....	21
<b>7 Typical frequency response for various types of mounting</b>	.....	<b>22</b>
<b>8 Further mounting aspects</b>	.....	<b>25</b>
8.1 Base strain sensitivity of an accelerometer	.....	25
8.2 Thermal mounting effects	.....	25
8.3 Electrical ground loops	.....	26
<b>Bibliography</b>	.....	<b>27</b>