

DIN EN ISO 20361:2020-08 (E)

Liquid pumps and pumps units - Noise test code - Grades 2 and 3 of accuracy (ISO 20361:2019)

Contents	Page
European foreword	3
▣ ^{A11} European foreword to Amendment ▣ ^{A11}	4
▣ ^{A11} Annex ZA (informative) Relationship between this European Standard and the essential requirements of Directive 2006/42/EC aimed to be covered ▣ ^{A11}	5
Foreword	6
Introduction	7
1 Scope	8
2 Normative references	8
3 Terms and definitions	9
4 Pump family and pump configuration	9
5 Sound power level determination	9
5.1 General	9
5.2 Specific considerations for reference box, measurement surface, position of microphones, and intensity probe	11
5.2.1 General	11
5.2.2 Reference box	12
5.2.3 Measurement surface and microphone positions	13
5.2.4 Position of microphones and intensity probes	17
6 Emission sound pressure level determination	17
6.1 Basic standard to be used	17
6.2 Relevant work station	17
7 Uncertainty	17
8 Installation and mounting conditions	18
8.1 General	18
8.2 Noise test situation	18
8.2.1 General	18
8.2.2 Test on site	19
8.2.3 Test on shop test stand	19
8.2.4 Test on a specific facility intended for acoustic measurement	19
9 Operating conditions during noise measurement	19
9.1 General	19
9.2 Pumped liquid	20
9.3 NPSHA value	20
10 Information to be recorded and to be reported	20
10.1 General	20
10.2 Test report	20
11 Declaration and verification of noise emission values	21
Annex A (normative) Pump alone — Measurement surface	22
Annex B (normative) Pump units — Microphone positions for sound pressure level measurement on the measurement surface for different pump types and sizes	23
Annex C (informative) Example of a dual-number noise declaration	30
Bibliography	31