DIN EN ISO 20361:2016-05 (E)

Liquid pumps and pump units - Noise test code - Grades 2 and 3 of accuracy (ISO 20361:2015)

Contents

Page

European foreword ... **3**

Annex ZA (informative) **Relationship between this International Standard and the Essential Requirements of EU Directive 2006/42/EC** ... **4**

Foreword ... **5**

Introduction ... **6**

1 Scope ... **7**

2 Normative references ... **7**

3 Terms and definitions ... **8**

4 Pump family and pump configuration ... **8**

5 Sound power level determination ... **8**
5.1 General ... 8
5.2 Specific considerations for reference box, measurement surface, position of microphones, and intensity probe ... 10
5.2.1 General ... 10
5.2.2 Reference box ... 10
5.2.3 Measurement surface and microphone positions ... 12
5.2.4 Position of microphones and intensity probes ... 16

6 Emission sound pressure level determination ... **16**
6.1 Basic standard to be used ... 16
6.2 Relevant work station ... 16
6.3 Measurement uncertainty ... 16

7 Installation and mounting conditions ... **17**
7.1 General ... 17
7.2 Noise test situation ... 17
7.2.1 General ... 17
7.2.2 Test on site ... 17
7.2.3 Test on shop test stand ... 17
7.2.4 Test on a specific facility intended for acoustic measurement ... 17

8 Operating conditions during noise measurement ... **18**
8.1 General ... 18
8.2 Pumped liquid ... 18
8.3 NPSHA value ... 18

9 Information to be recorded ... **18**
9.1 General ... 18
9.2 Test report ... 18

10 Declaration and verification of noise emission values ... **19**

Annex A (normative) **Pump alone — Measurement surface** ... **20**

Annex B (normative) **Pump units — Microphone positions for sound pressure level measurement on the measurement surface for different pump types and sizes** ... **21**

Bibliography ... **28**