ISO 20361:2019-07 (E)

Liquid pumps and pumps units - Noise test code - Grades 2 and 3 of accuracy

Contents

Page

Foreword iv

Introduction v

1 Scope 1

2 Normative references 1

3 Termsanddefinitions 2

4 Pumpfamilyandpumpconfiguration 2

5 Sound power level determination 2
5.1 General 2
5.2 Specific considerations for reference box, measurement surface, position of microphones, and intensity probe 4
5.2.1 General 4
5.2.2 Reference box 5
5.2.3 Measurement surface and microphone positions 6
5.2.4 Position of microphones and intensity probes 10

6 Emission sound pressure level determination 10
6.1 Basic standard to be used 10
6.2 Relevant work station 10

7 Uncertainty 10

8 Installationandmountingconditions 11
8.1 General 11
8.2 Noise test situation 11
8.2.1 General 11
8.2.2 Test on site 12
8.2.3 Test on shop test stand 12
8.2.4 Test on a specific facility intended for acoustic measurement 12

9 Operatingconditionsduringnoisemeasurement 12
9.1 General 12
9.2 Pumped liquid 13
9.3 NPSHA value 13

10 Information to be recorded and to be reported 13
10.1 General 13
10.2 Test report 13

11 Declarationandverificationofnoiseemissionvalues 14

Annex A (normative) Pump alone -- Measurement surface 15

Annex B (normative) Pump units -- Microphone positions for sound pressure level measurement on the measurement surface for different pump types and sizes 16

Annex C (informative) Example of a dual-number noise declaration 23

Bibliography 24