DIN EN 12050-4:2015-05 (E)

Wastewater lifting plants for buildings and sites - Part 4: Non-return valves for faecal-free wastewater and wastewater co ntaining faecal matter

Contents

Page

Foreword 4

1 Scope 5

2 Normative references 5

3 Terms, definitions, symbols and abbreviations 5
3.1 Terms and definitions 5
3.2 Symbols and abbreviations 6
3.2.1 Symbols 6
3.2.2 Abbreviations 6

4 Materials and product characteristics 6
4.1 Materials 6
4.2 Mechanical resistance 6
4.3 Effectiveness 6
4.3.1 General 6
4.3.2 Connections 6
4.3.3 Solids passage 7
4.3.4 Cleanability 7
4.3.5 Nominal pressure of non-return valves 7
4.4 Internal leakage 7
4.5 Reaction to fire 7
4.5.1 General 7
4.5.2 Non-return valves classified as Class A1 without the need for testing 8
4.5.3 Non-return valves classified according to test results 8
4.6 Durability 8
4.6.1 General 8
4.6.2 Durability of watertightness 9
4.6.3 Durability of effectiveness 9
4.6.4 Durability of mechanical resistance 9
4.7 Noise level 9
4.8 Dangerous substances 9

5 Testing 9
5.1 General 9
5.2 Effectiveness testing 10
5.2.1 Faecal-free wastewater 10
5.2.2 Wastewater containing faecal matter 10
5.2.3 Internal leakage 10
5.2.4 Pressure testing 10
5.2.5 Testing of backwash devices 10

6 Assessment and verification of constancy of performance - AVCP 10
6.1 General 10
6.2 Type testing 10
6.2.1 General 10
6.2.2 Test samples, testing and compliance criteria 11
6.2.3 Test reports 12
6.3 Factory production control (FPC) 12
6.3.1 General 12

6.3.2 Requirements 12
6.3.3 Product specific requirements 15
6.3.4 Procedure for modifications 16

7 Marking, labelling and packaging 16
7.1 Manufacturer's declaration 16
7.2 Marking 16

Annex A (informative) Recommended materials 17

Annex ZA (informative) Clauses of this European Standard addressing the provisions of the EU Construction Products Regulation 18

ZA.1 Scope and relevant characteristics 18

ZA.2 Procedure for AVCP of non-return valves for faecal-free wastewater and wastewater containing faecal matter 19

ZA.2.1 System(s) of AVCP 19

ZA.2.2 Declaration of performance (DoP) 23

ZA.2.2.1 General 23

ZA.2.2.2 Content 23

ZA.2.2.3 Example of DoP 24

ZA.3 CE marking and labelling 26

Bibliography 30