

DIN EN 16713-2:2016-08 (E)

Domestic swimming pools - Water systems - Part 2: Circulation systems - Requirements and test methods

Contents		Page
European foreword		4
1	Scope	5
2	Normative references	5
3	Terms and definitions	5
4	Requirements	6
4.1	Filtration system design	6
4.2	Filtration system nominal flow rate	6
4.3	Extraction of pool water	7
4.3.1	General	7
4.3.2	Overflow channel	7
4.3.3	Skimmer	8
4.3.4	Main drain	8
4.4	Risk of suction entrapment	8
4.4.1	General	8
4.4.2	Suction chamber for floor and wall water outlets	10
4.4.3	Skimmers	10
4.5	Introduction of pool water	11
4.5.1	General	11
4.5.2	Introduction of pool water at reduced filtration flow rate	11
4.5.3	Air and water operated leisure feature	11
4.5.4	Other dangers	12
4.6	Pipe work	12
4.7	Pumps	13
4.7.1	Principle	13
4.7.2	General	13
4.7.3	Hydrostatic pressure test	14
4.7.4	Resistance of materials	14
4.7.5	Performance characterization	14
4.7.6	Self-priming performance	15
4.7.7	Endurance running test	15
4.7.8	Cyclical endurance test	15
4.7.9	Installation requirements	15
4.8	Information to the user and to the installer	15
5	Test methods	16
5.1	Dye test	16
5.2	Entrapment test	16
5.3	Hair entrapment test	17
5.3.1	Application	17
5.3.2	Test equipment	17
5.3.3	General	17
5.3.4	Hair entrapment in slits	20
5.4	Obstruction test for outlet suction grilles	20
5.4.1	General	20
5.4.2	Test device	20
5.4.3	Water flow	22
5.4.4	Procedure	22

5.4.5	Evaluation	23
5.5	Evaluation of pumps intended for pool water filtration and/or pool water circulation purposes	23
5.5.1	Principle	23
5.5.2	General comments on apparatus and test conditions	23
5.5.3	Self-priming performance	23
5.5.4	Hydrostatic pressure test	24
5.5.5	Endurance running test	25
5.5.6	Cyclical endurance test	25
5.6	Test report	25
Annex A (informative) Pressure test procedure		26
Annex B (informative) Pump selection principle		27
Annex C (informative) Environmental aspects		28
Bibliography		31