

DIN EN 13434:2022-04 (E)

Devices to prevent pollution by backflow of potable water - Mechanical disconnecter, flow actuated - Family G, Type B

Contents	Page
European foreword	4
Introduction.....	5
1 Scope.....	6
2 Normative references.....	6
3 Terms and definitions.....	7
4 Denomination.....	9
5 Designation	9
6 Symbolization.....	9
7 Physical-chemical characteristics.....	10
7.1 General.....	10
7.2 Materials	10
7.2.1 General.....	10
7.2.2 Dezincification resistant copper alloy	10
7.3 Surface of the body	10
7.3.1 General.....	10
7.3.2 Epoxy Coating.....	10
7.3.3 Polyamide Powder based Coating	10
7.3.4 Other coatings.....	10
8 Design.....	11
8.1 General.....	11
8.2 Relief valve/Obturator.....	11
8.2.1 General requirements.....	11
8.2.2 Mechanical Disconnecter Family G, Type B.....	11
8.3 Disconnection distance.....	12
9 Characteristics and tests	12
9.1 General.....	12
9.2 General tolerances	12
9.2.1 Tolerance of set parameters.....	12
9.2.2 Accuracy of measuring instruments	12
9.3 Expression of the results.....	12
9.4 Dimensional characteristics	12
9.4.1 Connections.....	12
9.4.2 Pressure tapping.....	12
9.5 Mechanical characteristics.....	13
9.5.1 General.....	13
9.5.2 Mechanical resistance of the body under pressure.....	13
9.5.3 Endurance.....	14
9.5.4 Torque test of Captive rotating Nuts and Bending Strength – Tightness of the Body	15
9.6 Leak tightness characteristics.....	16
9.6.1 Verification of the leak tightness of the downstream check valve in closing direction.....	16
9.6.2 Verification of the leak tightness of check valve device (opening direction)	17

9.6.3	Verification of the leak tightness of the upstream spring loaded obturator in drain position at low pressure (in the opening direction).....	17
9.7	Hydraulic characteristics.....	18
9.7.1	Test rig— General circuit.....	18
9.7.2	Verification of the pressure loss as a function of flow rate	19
9.7.3	Verification of the opening and closing pressures of relief valve	20
9.7.4	Verification of the relief valve flow rate.....	20
9.8	Compatibility with the products used for shock disinfection of the networks	21
9.8.1	Requirement.....	21
9.8.2	Test method	21
9.9	Acoustic tests.....	21
9.9.1	General	21
9.9.2	Procedure	21
10	Order of testing	22
11	Marking and technical documents	23
11.1	General	23
11.2	Marking	23
11.3	Technical documents	24
12	Presentation at delivery.....	24
Annex A (informative)	Examples of presentation of test results.....	25
Bibliography	28