TEST CODE SHEET

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1. TYPE OF TEST(S)

Endurance test.

2. WATER REGULATIONS REQUIREMENTS FOR FITTINGS

Schedule 2

15-(1) …. every water system shall contain an adequate device or devices for preventing backflow of fluid from any appliance, fitting or process from occurring.

3. BRITISH STANDARDS OR WATER SPECIFICATION, DEEMED TO SATISFY WATER REGULATIONS REQUIREMENTS

3.1 Fittings with 'kitemarks' which are deemed to satisfy the requirements of regulations are listed in the directory.

4. TEST PROCEDURE

Note Unless otherwise stated the temperature of the test fluid shall be 20 ± 10°C.

4.1 Tests applicable to the following:-

REDUCED PRESSURE ZONE (RPZ) VALVE BA
DN8 to DN250
Devices for the prevention of contamination by backflow.

(A) REDUCED PRESSURE ZONE (RPZ) VALVE BA (Derived from prEN 12729. Clause 9.4.2)
DN8 to DN250

TEST METHOD

APPARATUS The following apparatus is required.

A supply of water to achieve the test flow rates/at the required temperature/pressure.

Pressure gauges.

PROCEDURE The procedure shall be as follows:-

(1) Mount the device on the RPZ test rig, in its normal working position. (Reference setting-up procedure 1-50-75).

(2) Subject the valve to 5000 cycles at a temperature of 20 ± 5°C for valves intended for cold water use, or at a temperature of 65 ± 2°C for valves intended for hot water use.

(3) Circulate water at a flow rate as given in Table 1 ± 5% for 6 ± 2 seconds.

(4) Stop the flow and apply upstream a static pressure of 3 bar ± 0.25 bar for 6 ± 2 seconds.

(5) Relieve the upstream to atmosphere and hold for 6 ± 2 seconds.

(6) Circulate water at a flow rate as given in Table 1 ± 5% for 6 ± 2 seconds.

(7) Stop the flow and apply upstream a static pressure of 10 bar ± 0.5 bar for 6 ± 2 seconds.

(8) Relieve the upstream to atmosphere and hold for 6 ± 2 seconds.

This constitutes 1 cycle.

The 5000 cycles are broken down into seven periods as follows:
- 1250 cycles
- Rest the valve for 14 hours ± 1 hour.
- 1250 cycles.
- Subject the valve to a static pressure of 10 bar ± 1.0 bar at the inlet for 14 hours ± 1 hour.
- 1250 cycles.
- Subject the valve to an upstream pressure of 3 bar ± 0.5 bar and a downstream pressure of 10 bar for 14 hours ± 1 hour.
- 1250 cycles.

5. ACCEPTANCE CRITERIA

At the conclusion of the test, the device shall not show any signs of deterioration in its coating, elastomer parts or synthetic materials.

Upon completion of this test and without replacement of any component, the device shall be capable of meeting the performance requirement of tests TCS 1111.13, 1111.14, 1111.15 & 1111.16.

Table 1

DN	8	10	15	20	25	32	40	
Flow Rate m^3/hr	0.4	0.6	1.3	2.2	3.5	5.8	9	
DN	50	65	80	100	125	150	200	250
Flow Rate m^3/hr	14	24	36	56	56	56	56	56