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TEST CODE SHEET

1. TYPE OF TEST(S)

Durability 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 $20 \pm 10^{\circ}\text{C}$.

4.1 Tests applicable to the following:-

ANTI VACUUM VALVE

DN8 to DN50.

Devices for the prevention of contamination by backflow.

(A) **ANTI VACUUM VALVE** (Derived from prTC W1 111 : 1998. Clause 11.6)
DN8 to DN50.

TEST METHOD

APPARATUS The following apparatus is required. (Reference Figure 43).

Remove control valves (S1), being of the direct acting type with a low pressure differential when fully open.

Control valves (V1, V2), capable of fine regulation (e.g. needle type valves).

A pressure gauge (P1).

Pipe of the same nominal size as that of the valve.

A transparent tube.

A water reservoir.

PROCEDURE The procedure shall be as follows:

- (1) Mount the device in the test system in its normal working position. (Reference Figure 43).
- (2) With (S1) open, adjust (V1) and (V2) together to achieve $6 \text{ bar} \pm 0.5 \text{ bar}$ at (P1) and with a flow velocity at the inlet to the in-line anti-vacuum valve of $1 \text{ m/s} (\pm 0.5 \text{ m/s})$. (Test Specimen Number 1).
- (3) Arrange the remote control valve to automatically to give conditions in (2) above, for 6 seconds (± 0.5 seconds). Opening of the valve (S1) shall create no pressure peaks greater than 10 bar.

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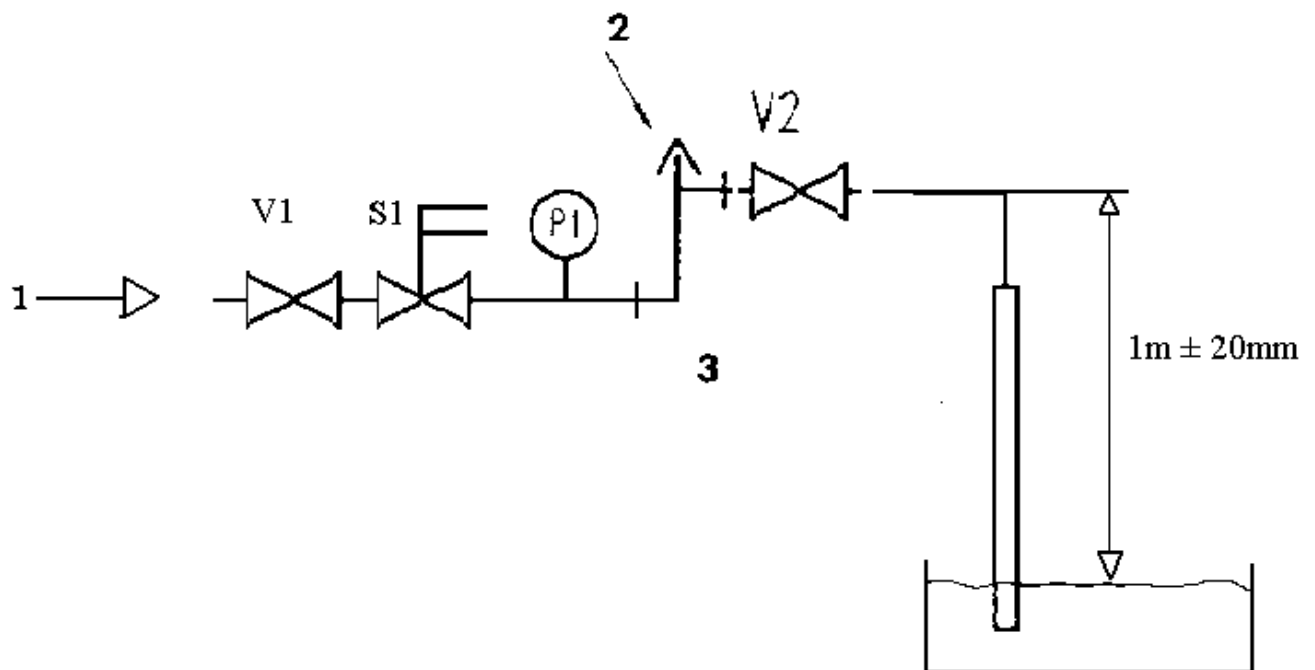
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- (4) Then close (S1) for 6 seconds (± 0.5 seconds).
- (5) One test cycle includes the sequences of (2) & (4). Changeover to be accomplished in not more than 1 second, (for valve sizes of $DN \geq 50$, not more than 6 seconds).
- (6) Subject the valve to 80 000 cycles with water at 90°C for the first hour, and then at 65°C for the remainder of test, (for valve sizes of $DN \geq 50$, only water at 65°C is applied).

5. ACCEPTANCE CRITERIA

Throughout the test, the valve shall fully drain down at each cycle. There shall be no leakage during the test. Any failure during the course of the test is cause for rejection. The valve shall also meet the requirements of test code sheets 2212.17 and 1111.21.



Key

1. Water supply
2. Test-specimen
3. Transparent
4. Water reservoir

Figure 43