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TEST CODE SHEET

1. TYPE OF TEST(S)

Bending strength.

2. WATER REGULATIONS REQUIREMENTS FOR FITTINGSSchedule 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 DN80.

Devices for the prevention of contamination by backflow.

(A) **ANTI VACUUM VALVE** (Derived from prTC W1 111 : 1998. Clause 11.4)
DN8 to DN80.

TEST METHOD

APPARATUS The following apparatus is required.

A stop valve '1' at the inlet.

A pressure gauge 'P1'.

A mounting '2' to which the in-line anti-vacuum valve under test is fixed.

A 1m long steel pipe '3'. The pipe is threaded at one end to connect to the outlet of the anti-vacuum valve and the other end equipped with a connection to load (W). The anti-vacuum valve has the intermediate parts removed.

A stop valve '4'.

A flexible hose '5'.

PROCEDURE The procedure shall be as follows:

- (1) Install the in-line anti-vacuum valve on the test rig shown in Figure 46. Purge the air by means of valve '4' and then close valve '4'.
- (2) Apply a load W, relative to the valves size, to produce the bending moment given in Table 46.
- (3) Apply a pressure of $16 \text{ bar} \pm 0.5 \text{ bar}$.

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- (4) Hold the pressure for 10 minutes \pm 30 seconds and then reduce to atmospheric.

Table 46

Nominal size - DN	8	10	15	20	25	32	40	50	65	80
Bending moment for thread ends - Nm	30	40	80	150	300	400	500	600	750	950
Bending moment for compression ends - Nm	30	30	50	85	125	160	200	300	-	-

NOTE: The bending moment is measured at the connection to the pipe. In calculating the bending moment, make due allowances for the mass of the pipework, valves and any loads imposed by the test equipment.

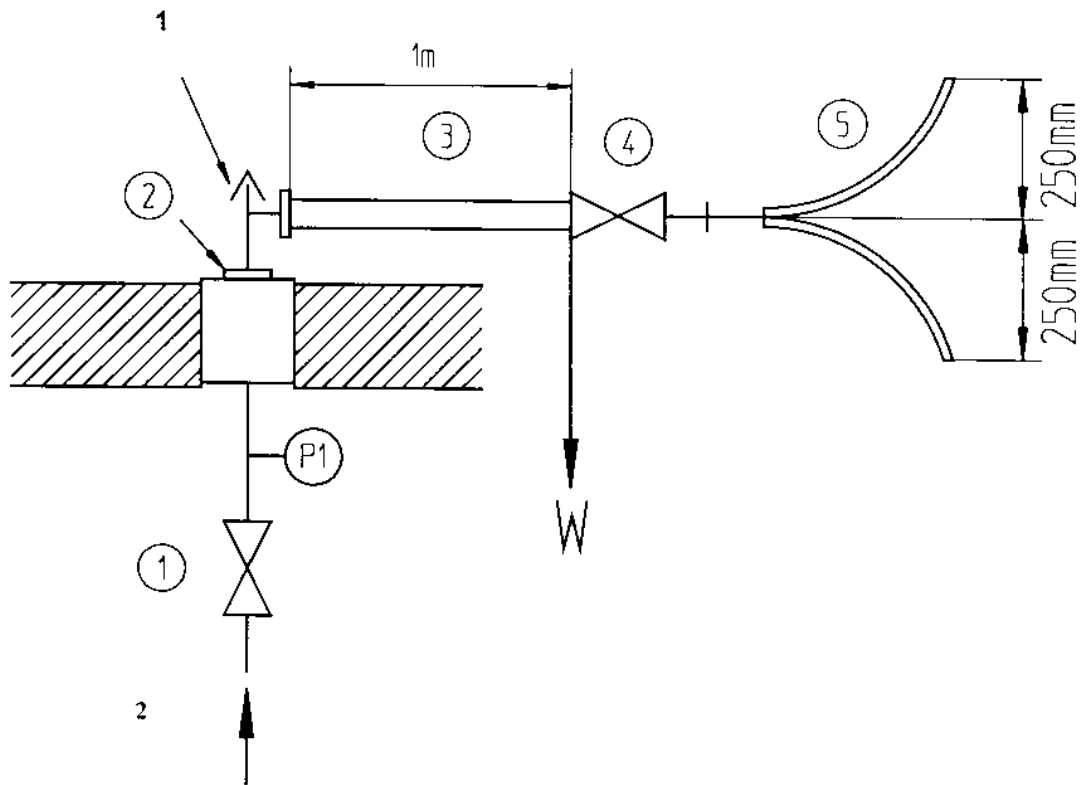
5. ACCEPTANCE CRITERIA

There shall be no leakage, permanent deformation or leakage to the body of the valve, or leakage at the air inlet. The anti-vacuum valve shall meet the TCS 1111.21 with the bending moment applied.

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Key

- 1 Test-specimen
- 2 Water supply

Figure 46