TEST CODE SHEET

---

1. TYPE OF TEST(S)

Pressure tightness under a high reverse pressure.

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:-

CHECK VALVES
DN6 to DN250.
Devices for the prevention of contamination by backflow.

(A) CHECK VALVES (Derived from prEN 164167 W1 108. Clause 7.7)
DN6 to DN250.

TEST METHOD

APPARATUS The following apparatus is required.

A supply of water to achieve the test flow rates at the required pressure. (Reference Figure 04).

Sight glass, scale graduated in mm

Pressure gauges

Control valves.

The example of the test equipment shown in the Figure 04 is for guidance only.
Laboratory equipment must be designed to ensure that the valve can be tested to verify the requirement.

NOTE: For double check valves each single check valve shall be tested separately. The check valve not being tested shall be either removed or the obturator held in the open position.

PROCEDURE The procedure shall be as follows:-

First reading

(1) Mount the device in the test system in its normal working position. (Reference Figure 04).

(2) Close all the valves.

(3) Open valves ‘2’, ‘3’, and ‘7’, then valve ‘1’. Fill the pipe ‘12’ and tube ‘14’. Purge the air. Close ‘3’, ‘7’, ‘2’ and ‘1’ when the air has been vented from the circuit.

(4) Slowly open valve ‘3’ and open valve ‘2’ slightly, until the level of water in the pipe ‘14’ reaches level (b) as defined in the TCS 1111.9, stage (8).

(5) Slowly close valve ‘2’ so as to maintain this level.

(6) Open the valve ‘5’ and gradually apply pressure at an approximate rate of 1 bar per 5 seconds, up to 16 bar ± 0.5 bar. Maintain the pressure for 5 minutes and then record the level of the water in tube ‘14’.

Second reading

(7) Maintain the pressure for a further 5 minutes and then record the level of the water in tube ‘14’ again.

Third reading

(8) Reduce the pressure at the outlet of the check valve gradually to atmospheric pressure and record the level of water in tube ‘14’.

5. ACCEPTANCE CRITERIA

There shall be no leakage across the valve at any time as verified by the water level in tube ‘14’ remaining constant for the ***first***, ***second*** and ***third readings***. There shall be no rupture or permanent deformation of any part of the valve. The check valve must meet the requirement of TCS 1313.4.

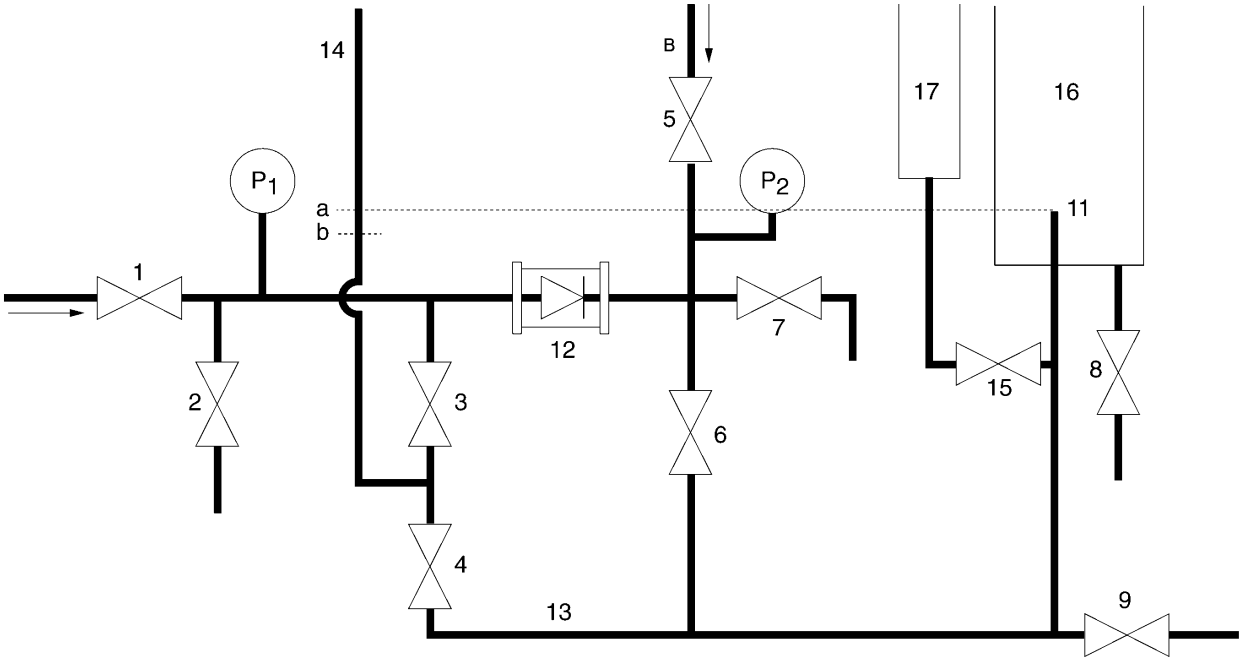

FIG 04