

BRITISH STANDARD

**BS 1212 :
Part 3 : 1990**

Float operated valves

**Part 3. Specification for diaphragm type
float operated valves (plastics bodied) for
cold water services only (excluding floats)**

© BSI 1990. NO COPYING IN ANY FORM WITHOUT WRITTEN PERMISSION FROM BSI



Committees responsible for this British Standard

The preparation of this British Standard was entrusted by the Building Services Standards Policy Committee (SEB/-) to Technical Committee SEB/2, upon which the following bodies were represented:

Association of Manufacturers of Domestic Electrical Appliances
 Association of Manufacturers of Domestic Unvented Supply Systems Equipment (MODUSSE)
 Association of Water Officers Ltd.
 British Bathroom Council
 British Gas plc
 British Non-Ferrous Metals Federation
 British Plastics Federation
 British Plumbing Fittings Manufacturers' Association
 British Valve and Actuator Manufacturers' Association
 Builders Merchants' Federation
 Consumer Policy Committee of BSI
 Department of the Environment (Building Research Establishment)
 Department of the Environment (Property Services Agency)
 Department of the Environment (Water Directorate)
 Department of Trade and Industry (National Weights and Measures Laboratory)
 Institute of Clerks of Works of Great Britain Inc.
 Institute of Plumbing
 Institution of Gas Engineers
 Institution of Water and Environmental Management
 Metal Sink Manufacturers' Association
 National Association of Plumbing, Heating and Mechanical Services Contractors
 Royal Institute of British Architects
 Society of British Gas Industries
 South London Consortium
 Water Companies Association
 Water Services Association of England and Wales

This British Standard, having been prepared under the direction of the Building Services Standards Policy Committee, was published under the authority of the Board of BSI and comes into effect on 31 December 1990

© BSI 1990

First published July 1979
 Second edition December 1990

The following BSI references relate to the work on this standard:
 Committee reference SEB/2
 Draft for comment 88 14227 DC

ISBN 0 580 18969 4

Amendments issued since publication

Amd. No.	Date	Text affected

Contents

	Page
Committees responsible	Inside front cover
Foreword	3
Specification	
Section 1. General	
1 Scope	4
2 Definitions	4
3 Designation for ordering	4
4 Marking	4
Section 2. Materials	
5 Effect of non-metallic materials on water quality	7
6 Plastics	7
7 Metals	7
Section 3. Design, construction and dimensions	
8 Inlet connection	8
9 Seats	8
10 Backnuts	9
11 Float arm or float arm assembly	9
12 Discharge arrangement	10
Section 4. Performance	
13 Distortion and deflection	11
14 Hydraulic pressure	11
15 Backflow prevention	11
16 Flow	11
17 Endurance	11
Appendices	
A Distortion test for backnuts and inlet shank	12
B Diaphragm type float operated valve assembly test	12
C Float attachment thread distortion test	15
D Shut-off pressure test	15
E Method of test for effect of dynamic pressure on discharge arrangement	15
F Backflow prevention test	16
G Flow test	17
H Endurance test	19

Figures		Page
1	Illustration of effective warning water level in relation to other commonly defined levels in a British Standard flushing cistern	5
2	Bottom entry valve inlet arrangement	6
3	Side inlet shank connectors	8
4	Hexagonal backnuts	9
5	Float connecting dimensions	10
6	Inlet shank and backnuts test plate	12
7	Valve assembly deflection test	13
8	Float attachment thread distortion test piece	15
9	Typical arrangement of apparatus for backflow prevention test	16
10	Flow test apparatus	18

Foreword

This Part of BS 1212 has been prepared under the direction of the Building Services Standards Committee. It is a revision of BS 1212 : Part 3 : 1979, which is withdrawn.

This Part of BS 1212 specifies the operational requirements of diaphragm type float operated valves (plastics bodied) (excluding floats) for use with cold water services only. It is a performance-based specification and the dimensional requirements are solely those essential to ensure fitting and interchangeability of complete valves.

The new features incorporated in this revision of BS 1212 : Part 3 include the following:

- (a) bottom entry requirements;
- (b) high pressure flow requirements;
- (c) rationalization to one size of float;
- (d) float attachment requirements;
- (e) dynamic pressure test requirements;
- (f) increased shut-off performance requirements.

The reference to lever ratio given in BS 1212 : Part 3 : 1979 has been deleted.

Terms of measurement are expressed in metric units except for pipe thread sizes which are retained in imperial units to accord with BS 2779.

For plastics floats, the designations specified in BS 2456 have been used.

Compliance with a British Standard does not of itself confer immunity from legal obligations.

Section 1. General

1 Scope

This Part of BS 1212 specifies the performance requirements, materials, certain dimensions and tolerances of diaphragm type float operated valves (plastics bodied) of nominal size $\frac{1}{2}$ for cold water services only, capable of accepting interchangeable low or high pressure renewable seats for use at pressure up to and including 3 bar¹⁾ and up to and including 14 bar respectively (see 9.1) and intended for use with 114 S or 114 NS floats (plastics) conforming to BS 2456.

NOTE 1. The nominal size is that corresponding with the Class G $\frac{1}{2}$ B pipe thread specified in BS 2779.

NOTE 2. The titles of the publications referred to in this standard are listed on the inside back cover.

2 Definitions

For the purposes of this Part of BS 1212 the following definitions apply.

NOTE. For further definitions see BS 4118.

2.1 diaphragm type float operated valve

A float operated valve in which the flow of water is controlled by the flexing of a diaphragm and which incorporates or is fitted with a discharge arrangement to conduct water into the cistern to which the float operated valve is to be fitted.

2.2 effective warning water level.

The level when water reaches 10 mm above the invert of a side entry connection warning pipe or 10 mm above the overflow level of a bottom connection warning pipe in a British Standard flushing cistern.

NOTE. Figure 1 gives an illustration of effective warning level in relation to other commonly defined levels in a British Standard flushing cistern.

2.3 datum level for backflow prevention test purposes

2.3.1 For side or bottom entry diaphragm type float operated valves with a horizontal seat centre line, the horizontal centre line at the seat.

2.3.2 For side or bottom entry diaphragm type float operated valves having no horizontal seat centre line, the interface of the seat and diaphragm.

3 Designation for ordering

Diaphragm type float operated valves shall be designated by the following:

- (a) the words 'diaphragm type float operated valve' followed by the number of this British Standard in the form of BS 1212/3.
- (b) whether side or bottom entry is required;
- (c) if bottom entry, the height of the effective warning water level (see figure 2).

Example. 'Diaphragm type float operated valve, BS 1212/3 bottom entry, $H = 250$ mm'.

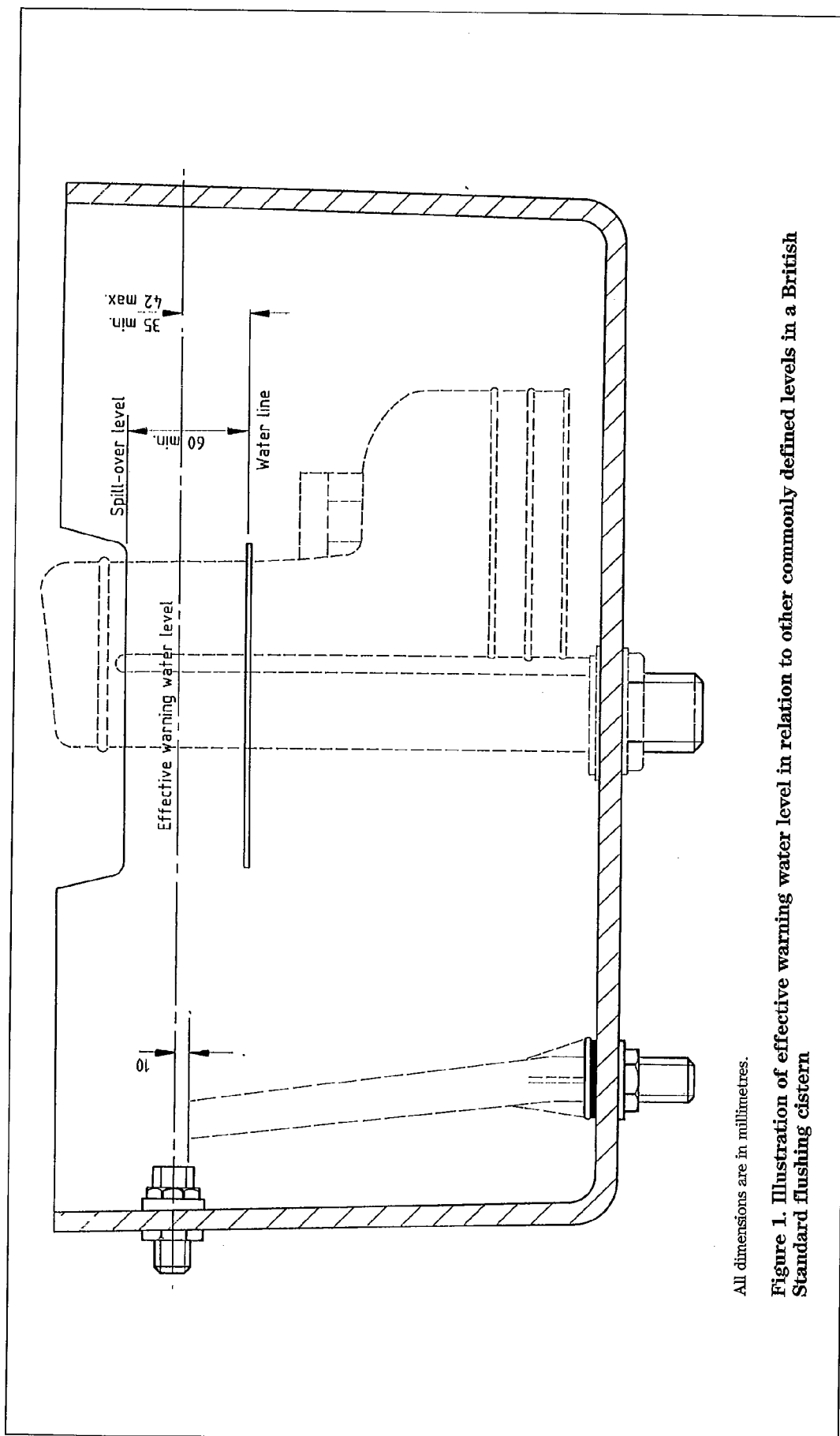
4 Marking

A diaphragm type float operated valve shall be permanently and legibly marked with the following information in such a way as not to deform any working part:

- (a) the number of this British Standard, in the form BS 1212/3²⁾;
- (b) the manufacturer's name or trade mark;
- (c) the words 'cold water only'.

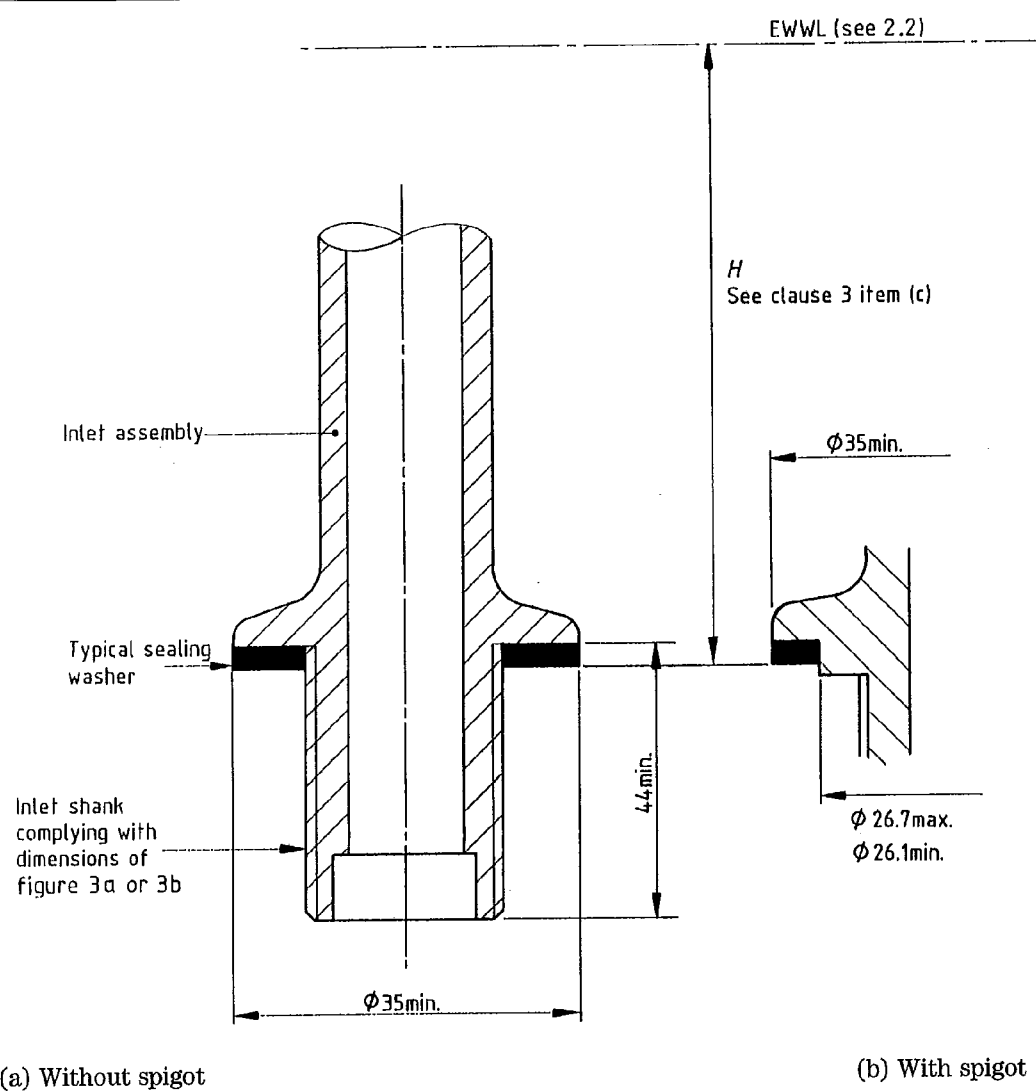
¹⁾ 1 bar = 10^5 N/m² = 10^5 Pa.

²⁾ Marking BS 1212/3 on or in relation to a product represents a manufacturer's declaration of conformity, i.e. a claim by or on behalf of the manufacturer that the product meets the requirements of the standard. The accuracy of the claim is therefore solely the responsibility of the person making the claim. Such a declaration is not to be confused with third party certification of conformity, which may also be desirable.



All dimensions are in millimetres.

Figure 1. Illustration of effective warning water level in relation to other commonly defined levels in a British Standard flushing cistern



All dimensions are in millimetres.

Figure 2. Bottom entry valve inlet arrangement

Section 2. Materials

5 Effect of non-metallic materials on water quality

When used under the conditions for which they are designed, non-metallic materials in contact with or likely to come into contact with potable water shall comply with BS 6920 : Part 1.

6 Plastics

With the exception of seats and backplate plungers, where no reworked material shall be used, the plastics parts of diaphragm type float operated valves shall be manufactured from materials containing, if required, the addition of not more than 15 % of the manufacturer's own clean reworked material complying with this Part of BS 1212. No other reworked material shall be used.

NOTE. When choosing plastics materials, manufacturers should take due account of the characteristics required for satisfactory use, i.e. mechanical, dimensional and chemical stability.

7 Metals

When components are manufactured from metals, the grade of material shall be chosen from the following list:

- | | |
|--|--------------------|
| (a) backnuts, lever arm or lever arm assembly: | BS 2874 CZ 121; or |
| | BS 2874 CZ 132; or |
| | BS 2872 CZ 122; or |
| | BS 2872 CZ 129; |
| (b) split cotter pin: | BS 2873 CZ 108. |

Section 3. Design, construction and dimensions

8 Inlet connection

8.1 General

Both side and bottom entry connection valves (for fitting into cisterns complying with BS 1125) shall incorporate an inlet assembly with a connection designed for use with either spigot or compression type connectors complying with BS 864 : Part 2 and shall have the dimensions given in (a) or (b) of figure 3, as appropriate.

8.2 Bottom inlet connection

A bottom inlet assembly shall incorporate either an integral flange without spigot or an integral flange with spigot and shall have the dimensions given in (a) or (b) of figure 2, as appropriate.

A bottom inlet assembly shall be supplied with a sealing washer to facilitate connection into the cistern.

8.3 Locking stay

A bottom entry valve assembly shall be supplied with an adjustable lockable stay at the upper end to act as a stop against the wall of the cistern.

9 Seats

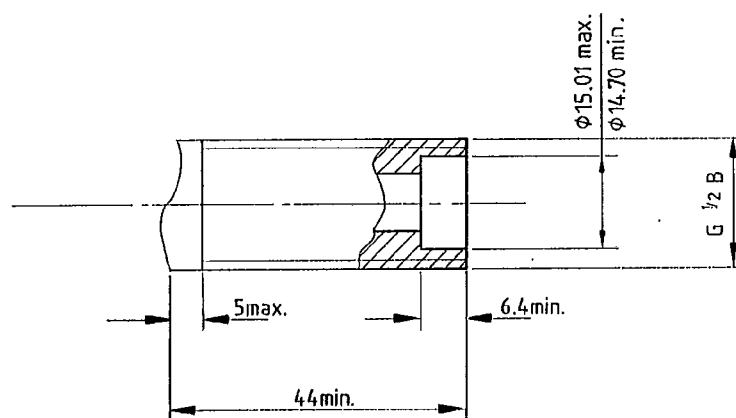
9.1 Number of seats

Every valve shall be supplied with interchangeable high pressure (HP) and low pressure (LP) seats.

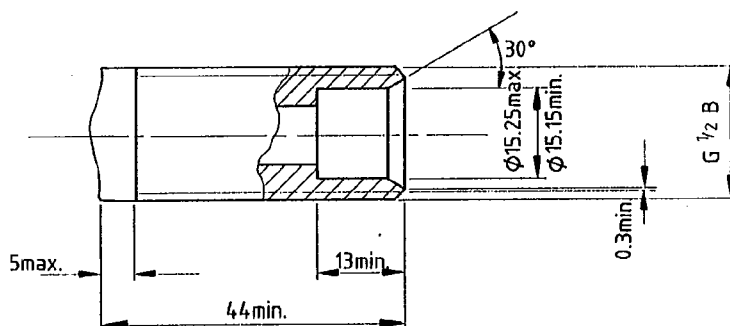
NOTE. The HP seat is intended for use with water pressures from a minimum of 3 bar to a maximum of 14 bar and the LP seat is intended for use with water pressure of 3 bar and below.

9.2 Colour

Seats shall be coloured white for HP, and red for LP.



(a) Side inlet shank for spigot type connector



(b) Side inlet shank for compression type connector

All linear dimensions are in millimetres.

Figure 3. Side inlet shank connectors

9.3 Distance between seat and diaphragm

The minimum distance between the seat outlet orifice and the shutting off face of the diaphragm shall be 1.5 mm when in the fully open position.

10 Backnuts

10.1 General

Backnuts shall be of the following types (see figure 4).

- (a) *Type (a)*. With a flange as dimensioned in (a) of figure 4.
- (b) *Type (b)*. With a spigot as dimensioned in (b) of figure 4.
- (c) *Type (c)*. Without a flange as dimensioned in (c) of figure 4.

10.2 Backnuts for use with side entry valves

An inlet shank or shank assembly shall be provided with two backnuts, one of which shall be type (b) (see 10.1).

10.3 Backnuts for use with bottom entry valves

An inlet shank without an integral spigot, see (a) of figure 2, shall be fitted with a type (b) backnut (see 10.1).

An inlet shank incorporating an integral spigot, see (b) of figure 2, shall be fitted with either a type (a), type (b) or type (c) backnut (see 10.1).

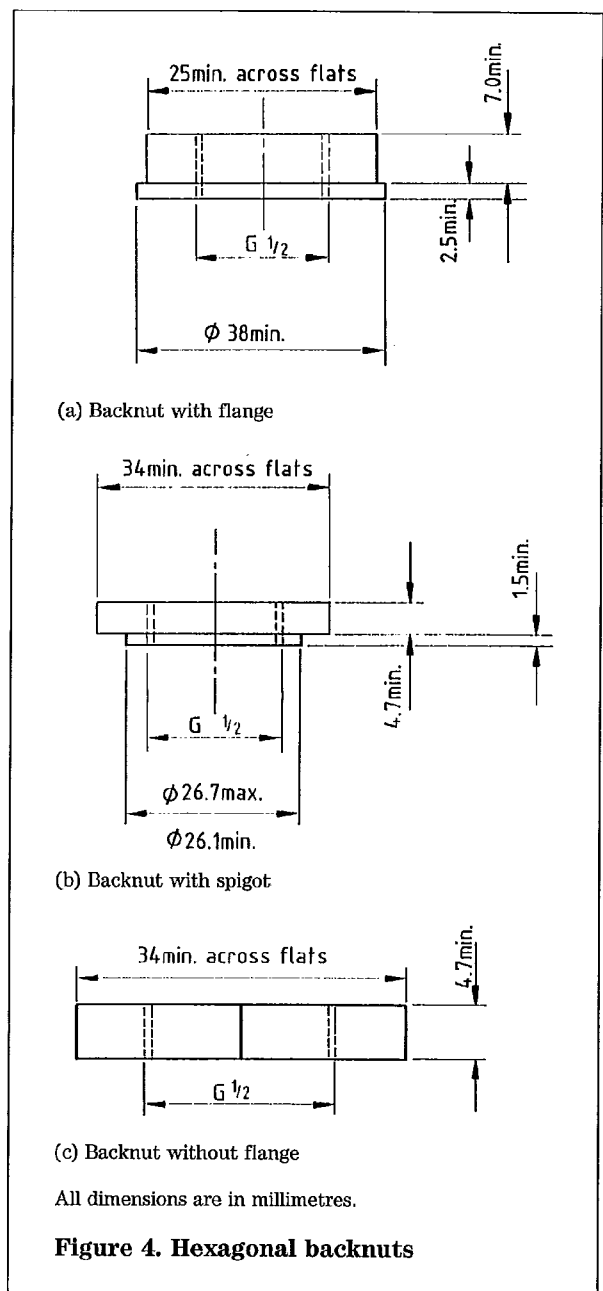
11 Float arm or float arm assembly

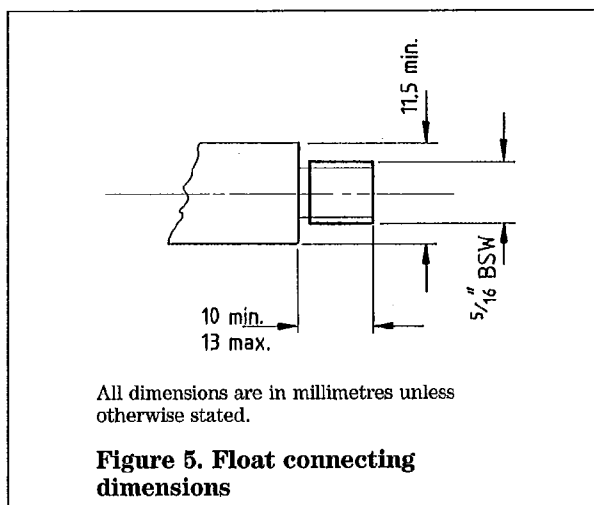
11.1 Adjustment

The valve shall be provided with a positive, readily accessible, method of adjustment and locking of the float's position without bending the lever to set the water level in the cistern into which the valve is fitted.

11.2 Float connecting dimensions

The float end of the float arm or float arm assembly shall be provided with a screwed portion for the attachment of a 114 S or 114 NS float complying with BS 2456 (see figure 5).





12 Discharge arrangement

12.1 Diaphragm type float operated valves shall comply with clause 15 (see note).

Where the discharge arrangement outlet point is above the datum level for backflow prevention test purposes, the construction shall not facilitate the subsequent fitting of any pipe or device to conduct water to a lower level.

NOTE. Where the discharge arrangement outlet is below the datum level for backflow prevention test purposes it is permissible to incorporate one or more constantly open air inlets or backflow prevention devices.

12.2 The discharge arrangement shall not obstruct the fitting of the valve into a British Standard WC flushing cistern.

Section 4. Performance

13 Distortion and deflection

13.1 Backnuts and inlet shank

When tested as described in appendix A there shall be no visible distortion of either the threads on the inlet shank or backnut(s) or of the flats of the backnut(s), that will effect the efficiency of the assembly.

13.2 Valve assembly

When tested as described in appendix B the initial deflection measured at the end of the float arm or float arm assembly shall be not greater than 25 mm and the additional deflection shall be not greater than 12 mm, resulting in a total deflection of not more than 37 mm.

13.3 Float attachment

When tested as described in appendix C the screwed portion of the float arm or float arm assembly for attachment of the float shall show no visible damage or distortion that will effect the efficiency of the assembly.

14 Hydraulic pressure

14.1 Static pressure

Whilst held in the closed position, a diaphragm type float operated valve shall be capable of withstanding a pressure of $20 + 0.25, - 0$ bar for a period of $60 + 5, - 0$ s without leaking.

14.2 Shut-off pressure

When tested as described in appendix D a diaphragm type float operated valve when assembled in working condition and fitted with the appropriate seat and a 114 S or 114 NS float complying with BS 2456 shall withstand a pressure up to 3 bar for a LP seat and a pressure up to 14 bar for a HP seat, as appropriate, without passing water.

14.3 Dynamic pressure on discharge arrangement

When tested as described in appendix E a diaphragm type float operated valve together with its discharge arrangement shall show no permanent deformation or separation of any component part.

15 Backflow

When tested as described in appendix F a diaphragm type float operated valve of either side or bottom inlet together with its discharge arrangement shall deliver no water into the catchpot.

NOTE. For valves with bottom inlet connection which use the same valve body and discharge arrangement as a side entry valve, compliance may be achieved if results of tests on a side entry valve prove satisfactory.

16 Flow

When tested as described in appendix G a diaphragm type float operated valve shall deliver a minimum of 9 L of water.

17 Endurance

When tested as described in appendix H a diaphragm type float operated valve shall complete 200 000 cycles and subsequently satisfy the hydraulic pressure requirements of clause 14.

Appendices

Appendix A Distortion test for backnuts and inlet shank

A.1 Apparatus

A.1.1 A test plate, as shown in figure 6, manufactured from material complying with grade 416S21 of BS 970 : Part 4, that has both flat surfaces prepared to a finish of $0.8 \mu\text{m}$ to $1.0 \mu\text{m}$ (Ra) (see BS 1134) when measured in all directions, and that has been hardened in oil or air at 950°C to 1020°C and tempered at 150°C to 250°C .

A.1.2 An open ended spanner, which is a snug fit on the flats of the backnut.

A.2 Procedure

A.2.1 Side entry

Screw the backnut to be used on to the inlet shank and insert the assembly through the test plate (A.1.1) and secure with the second backnut to be used (see 10.2).

Apply a torque of $15 \text{ N}\cdot\text{m}$ to the second backnut with the open ended spanner (A.1.2).

A.2.2 Bottom entry

Insert the inlet shank together with its sealing washer through the test plate (A.1.1) and secure with the backnut to be used (see 10.3).

Apply a torque of $15 \text{ N}\cdot\text{m}$ to the backnut with the open ended spanner (A.1.2).

A.3 Result

Record any visible distortion of the threads of either the inlet shank or the backnut(s) and of the flats of the backnut(s).

Appendix B Diaphragm type float operated valve assembly test

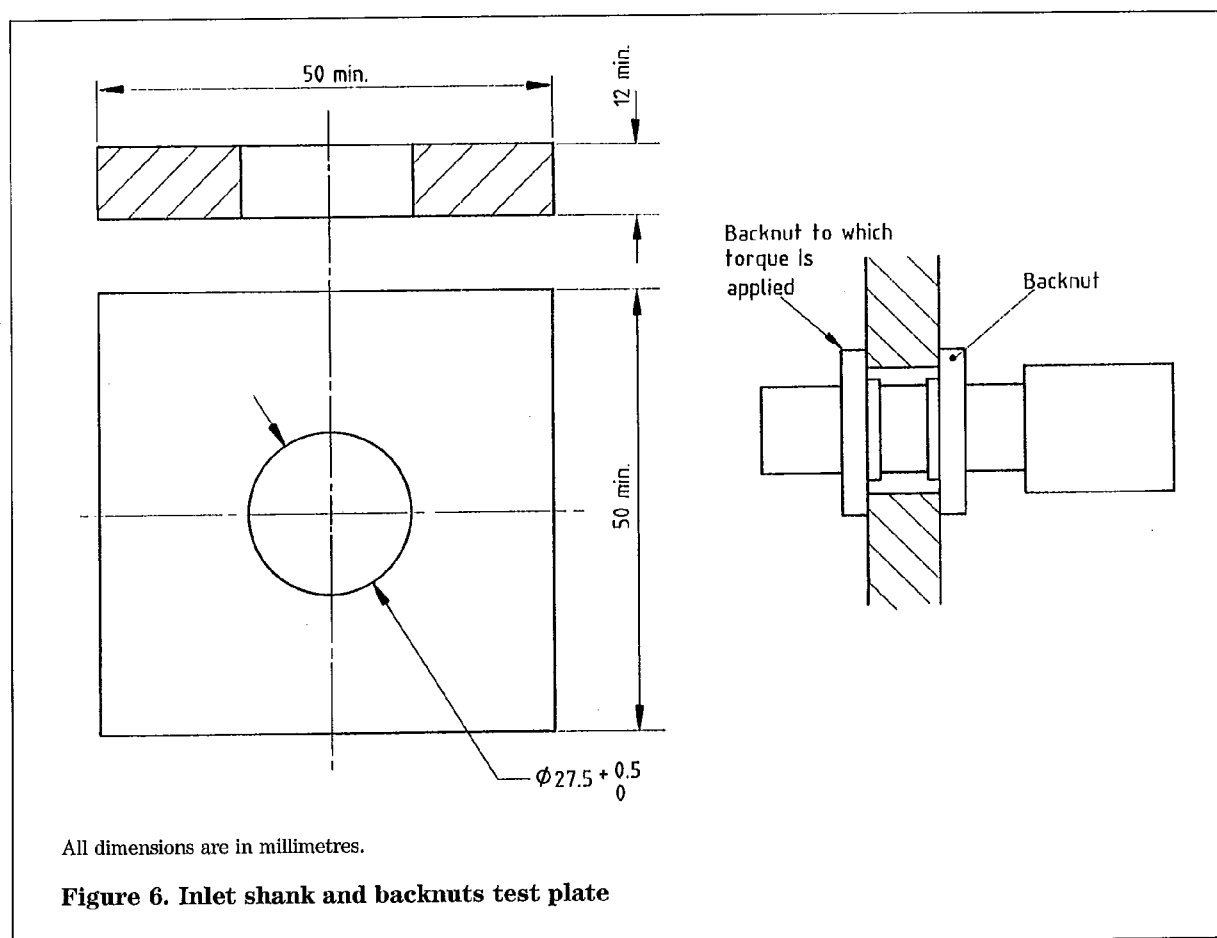
B.1 Procedure

B.1.1 General

Modify the valve to be tested by removing the diaphragm and substituting a rigid steel disc of the same diameter.

B.1.2 For side entry valves

Fit the assembled valve into a rigid test plate 12 mm minimum in thickness representing the



vertical side of a cistern and position the inlet shank within the test plate so that the union nut end is 19 ± 1 mm behind the face of the test plate as shown in (a) of figure 7.

B.1.3 For bottom entry valves

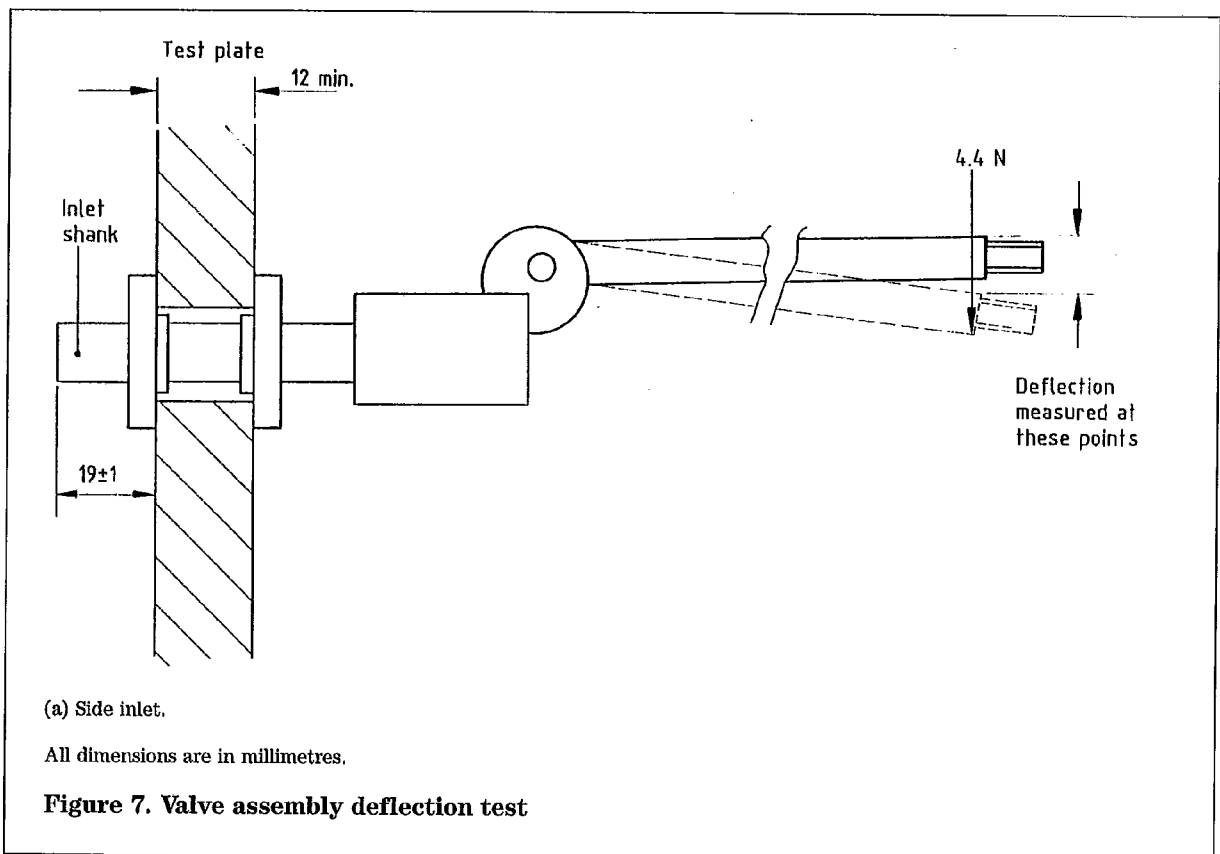
Fit the assembled valve into a rigid right angled test plate 12 mm minimum in thickness representing the base and vertical side of a cistern. Adjust and lock the stay to act as a stop against the face of the test plate representing the side of the cistern as shown in (b) of figure 7.

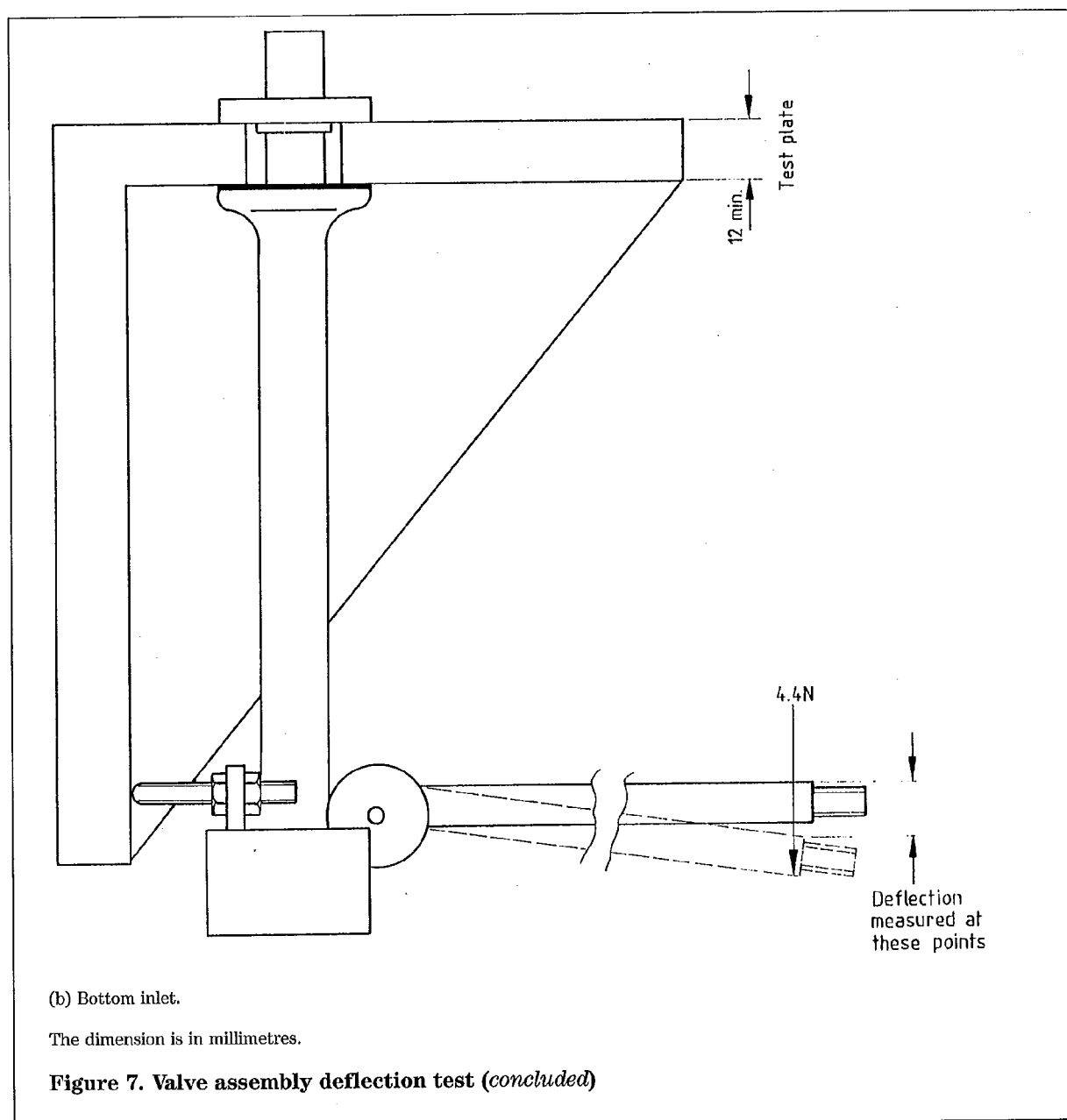
B.1.4 Load

Gradually apply a load of 4.4 ± 0.1 , -0 N in the closing direction at the float connection as shown in figure 7 and immediately record the deflection. Leave for 28 days in the loaded position.

B.2 Result

Having recorded the initial deflection immediately the load is applied, record the deflection again after 28 days.





Appendix C Float attachment thread distortion test

C.1 Apparatus

C.1.1 A *clamp*, capable of holding the float arm or float arm assembly.

C.1.2 A *hexagonal shaped metallic test piece*, with a 5/16 in BSW female thread in one end as detailed in figure 8.

C.1.3 A *torque wrench* with socket suitable for the metallic test piece, capable of imparting a torque of 1.7 ± 0.1 , -0 N·m.

C.1.4 A 10 ± 0.1 kg *weight*.

C.2 Procedure

C.2.1 Clamp the float arm or float arm assembly so that the screwed portion to be tested is positioned vertically downwards. Screw on the metallic test piece and apply a torque of 1.7 ± 0.1 , -0 N·m. Hang the 10 ± 0.1 kg weight co-axially from the test piece for a minimum period of 5 min.

C.2.2 Remove the weight and test piece.

C.3 Result

Record any visible signs of damage or distortion to the threads.

Appendix D Shut-off pressure test

D.1 Apparatus

D.1.1 A *cistern*, in which the float operated valve can be installed and which allows the attached float to be half immersed in water.

D.1.2 A *water supply*, capable of providing the required pressure.

D.1.3 A *pressure gauge*, to indicate the test pressure.

D.2 Procedure

Install the float operated valve assembled with the appropriate seat in the cistern, but with the discharge arrangement removed. Fill the cistern with water until the float is immersed to approximately but not more than half its volume. Gradually apply a pressure up to 3 bar for a low pressure seat and 14 bar for a high pressure seat, for a period of 60 ± 5 , -0 s.

D.3 Result

Record any evidence of the valve passing water.

Appendix E Method of test for effect of dynamic pressure on discharge arrangement

E.1 Apparatus

E.1.1 A *cold water supply*, capable of providing a dynamic pressure of 10 bar.

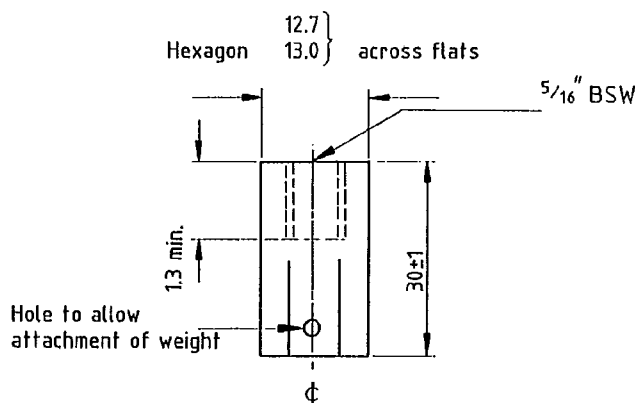
E.1.2 *Pressure gauge*, installed immediately upstream of the valve on test.

E.2 Procedure

Fit the float operated valve (installed with the HP seat) to be tested together with its discharge arrangement. Connect to the apparatus. With the valve held in the fully open position, gradually increase the supply pressure to 10 bar. Maintain this pressure for 60 ± 5 , -0 s.

E.3 Result

Record any permanent deformation or separation of components.



All dimensions are in millimetres unless otherwise stated.

Figure 8. Float attachment thread distortion test piece

Appendix F Backflow prevention test

F.1 Apparatus (see figure 9)

F.1.1 A means, for producing and maintaining an absolute pressure within a vacuum vessel of 0.2 bar, e.g. pump or injector, (marked (a) on figure 9).

F.1.2 A 50 mm full way gate valve in accordance with BS 5154 (marked (b) on figure 9).

F.1.3 A vacuum vessel (marked (c) on figure 9), comprising a galvanized mild steel cylinder, type reference Y58 complying with BS 417 : Part 2 with modified connection on the side to take G2 pipe complying with BS 21, with other connections for vacuum line, pressure gauge and drain valve (if fitted).

F.1.4 A calibrated pressure gauge (marked (d) on figure 9), to measure absolute pressures from 0 bar to 1.0 bar.

F.1.5 A 50 mm full way quick action valve (marked (e) on figure 9).

F.1.6 A water trap with catchpot and drain valve (marked (f) on figure 9).

F.1.7 Pipework (marked (g) on figure 9), of 50 mm nominal bore and not exceeding 2 m in the total

length connecting the vacuum vessel, full way quick action valve, water trap and connecting pipe to the float operated valve under test.

F.1.8 A 15 mm copper pipe (marked (h) on figure 9), complying with table X of BS 2871 : Part 1 : 1971, no longer than 200 mm in length, connecting the float operated valve under test to the 50 mm nominal bore pipework (see F.1.7).

F.1.9 A cistern complying with BS 1125 (side or bottom entry) with the warning pipe stoppered (marked (j) on figure 9).

F.1.10 A water supply.

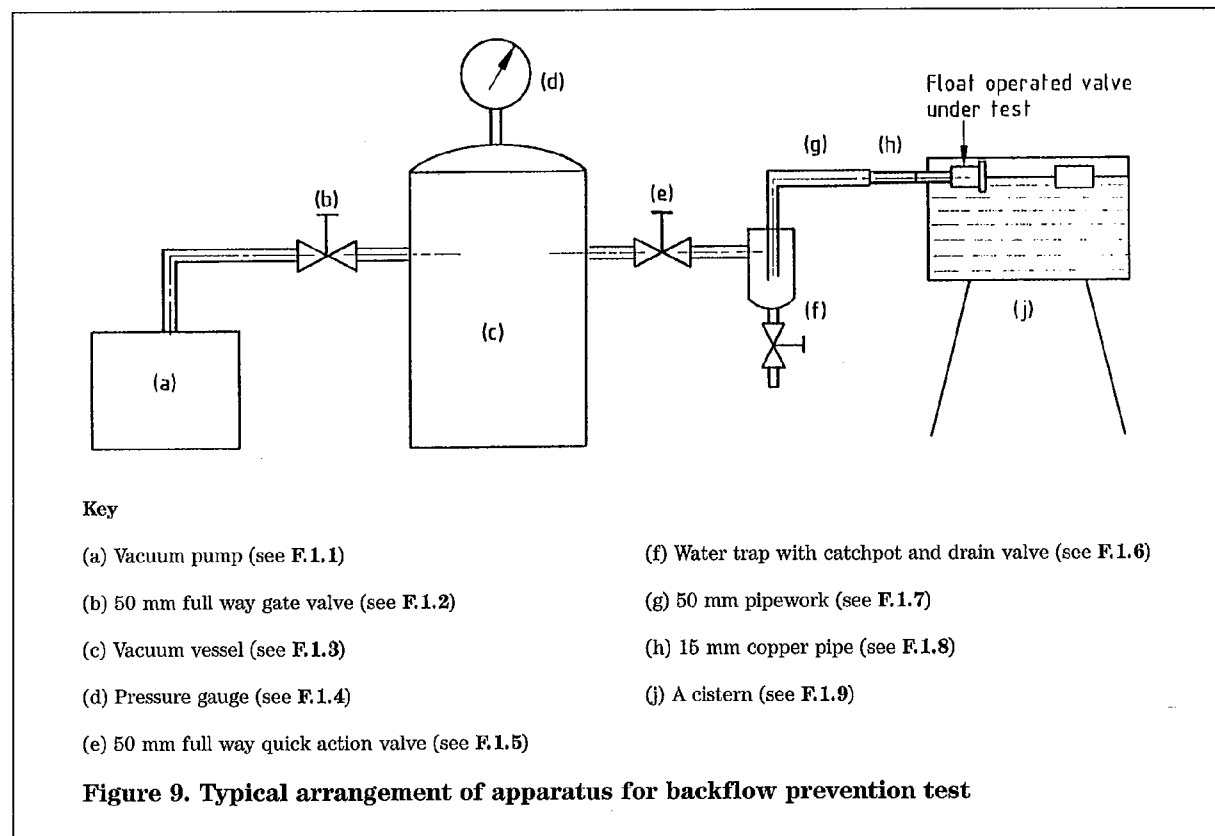
F.1.11 A length of 0.75 mm nominal diameter nylon thread.

F.2 Procedure

F.2.1 Foul the waterway of the float operated valve under test, over the whole passage from inlet shank to discharge arrangement outlet, by inserting the nylon thread (F.1.11).

F.2.2 Install the float operated valve complete with its float in the cistern (F.1.9).

F.2.3 Connect the float operated valve to the pipework and associated equipment as shown in figure 9 ensuring that no residual water is present within the system.



F.2.4 Set the float so as to produce the maximum water level when the float operated valve shuts off. Run water into the cistern until the water level is at the datum level for backflow prevention test purposes (see 2.3).

F.2.5 Close the full way quick action valve (F.1.5) and the water trap drainage valve (F.1.6) and open the fullway gate valve (F.1.2).

F.2.6 Activate the means of producing a vacuum until the gauge reading (F.1.4) on the vacuum vessel (F.1.3) is not more than 0.2 bar absolute. Close the fullway gate valve.

F.2.7 Quickly open the fullway quick action valve and allow it to remain open for 60 s. Close the fullway quick action valve.

F.2.8 Open the water trap drain valve to ascertain if any water was present in the catchpot (see clause 15).

F.2.9 Lower the water level in the cistern to 20 mm below the datum level for backflow test purposes and repeat the procedures described in F.2.5 to F.2.8 inclusive.

F.2.10 Repeat F.2.9 at 20 mm intervals of level until the water level is at least 20 mm below the lowest point of the discharge arrangement or the cistern is empty.

Appendix G Flow test

G.1 Low pressure seat test

G.1.1 Apparatus

G.1.1.1 A test rig (see (a) of figure 10) capable of maintaining 1 ± 0.1 m head of water at the seat of the valve under test, comprising a cistern connected, through 15 mm copper pipework (in accordance with F.1.8) to the specimen valve via a controlling gate valve.

G.1.2 Procedure

Fit the float operated valve (installed with the LP seat) to be tested together with its discharge arrangement. Remove the float. Cause the valve to discharge water from cistern A into container B (see figure 10) for a period of 140 ± 5 s whilst maintaining, for the duration of the test the water level in cistern A at a height of 1 ± 0.1 m above the centre of the inlet of the valve.

G.1.3 Result

Record the amount of water in container B.

G.2 High pressure seat test

G.2.1 Apparatus

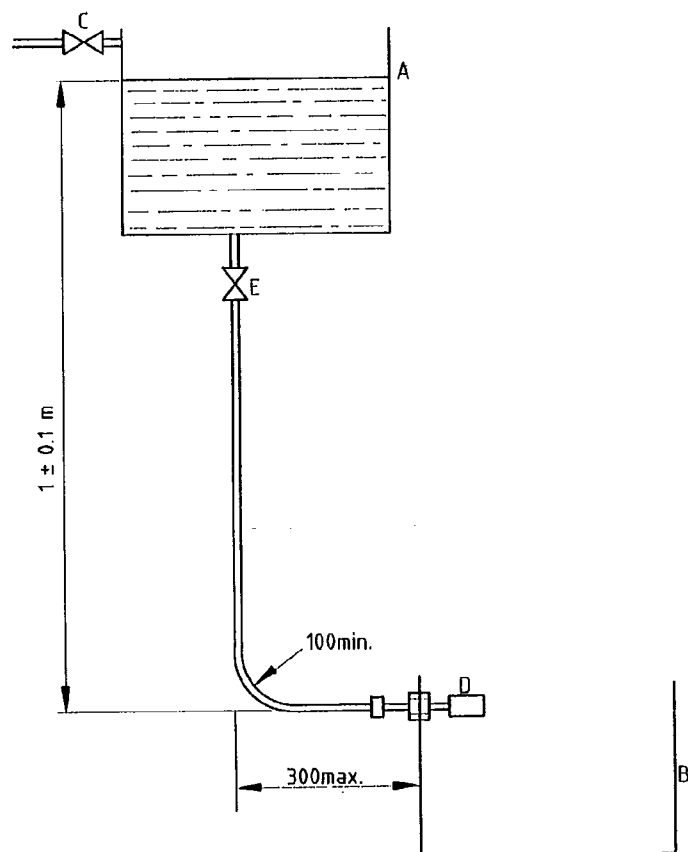
G.2.1.1 A test rig (see (b) of figure 10) capable of maintaining a constant pressure of 3 ± 0.1 bar at the inlet of the valve under test, connected through 15 mm copper pipework in accordance with F.1.8 to the specimen valve via a controlling gate valve.

G.2.2 Procedure

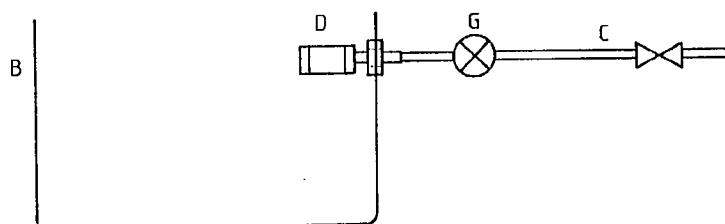
Fit the float operated valve (installed with HP seat) to be tested together with its discharge arrangement. Remove the float. Cause the valve to discharge water into container B for a period of 140 ± 5 s whilst maintaining, for the duration of the test, the constant pressure of 3 ± 0.1 bar at the seat.

G.3 Result

Record the amount of water in container B.



(a) Typical diagram of low pressure seat minimum flow test apparatus



(b) Typical high pressure seat minimum flow test apparatus

All dimensions are in millimetres unless otherwise stated.

Figure 10. Flow test apparatus

Key

- A Cistern
- B Water container
- C Stop valve capable of maintaining level at 1 m
- D Fitting under test
- E Gate valve complying with BS 5154

Key

- B Water container
- C Gate valve complying with BS 5154
- D Fitting under test
- G Pressure regulating valve set at 3 bar

Appendix H Endurance test

H.1 Apparatus

H.1.1 *Test equipment*, capable of operating the float arm or float arm assembly to open fully and to close fully the valve on an automatic cycle.

H.1.2 *A water supply to the valve*, to be maintained at 1 ± 0.1 m head, and the water temperature not to exceed 30°C .

H.1.3 *A closure force*, equivalent to 4.4 ± 0.1 N, applied at the end of the float arm or float arm assembly.

H.2 Procedure

H.2.1 Install the valve onto the test rig.

H.2.2 Fully open the valve in not less than 1 s.

H.2.3 Allow the valve to remain in the open position for a maximum of 2 s.

H.2.4 Fully close the valve in not less than 1 s.

H.2.5 Allow the valve to remain closed for a maximum of 2 s.

H.2.6 Carry out 200 000 cycles (the procedures described in **H.2.2** to **H.2.5** constitute one cycle of not less than 6 s duration).

H.3 Result

Record any evidence of component failure.

Publications referred to

- BS 21 Specification for pipe threads for tubes and fittings where pressure-tight joints are made on the threads (metric dimensions)
- BS 417 Specification for galvanized low carbon steel cisterns, cistern lids, tanks and cylinder
Part 2 Metric units
- BS 864 Capillary and compression tube fittings of copper and copper alloy
Part 2 Specification for capillary and compression fittings for copper tubes
- BS 970 Specification for wrought steels for mechanical and allied engineering purposes
Part 1 General inspection and testing procedures and specific requirements for carbon, carbon manganese, alloy and stainless steel
Part 4 Valve steels
- BS 1125 Specification for WC flushing cisterns (including dual flush cisterns and flush pipes)
- BS 1134 Assessment of surface texture
- BS 2456 Specification for floats (plastics) for ballvalves for hot and cold water
- BS 2779 Specification for pipe threads for tubes and fittings where pressure-tight joints are not made on the threads (metric dimensions)
- BS 2871 Specification for copper and copper alloys. Tubes
Part 1 Copper tubes for water, gas and sanitation
- BS 2872 Specification for copper and copper alloy forging stock and forgings
- BS 2873 Specification for copper and copper alloys. Wire
- BS 2874 Specification for copper and copper alloy rod and sections (other than forging stock)
- BS 4118 Glossary of sanitation terms
- BS 5154 Specification for copper alloy globe, globe stop and check, check and gate valves
- BS 6920 Suitability of non-metallic products for use in contact with water intended for human consumption with regard to their effect on the quality of the water
Part 1 Specification

**BS 1212 :
Part 3 : 1990****BSI — British Standards Institution**

BSI is the independent national body responsible for preparing British Standards. It presents the UK view on standards in Europe and at the international level. It is incorporated by Royal Charter.

Contract requirements

A British Standard does not purport to include all the necessary provisions of a contract. Users of British Standards are responsible for their correct application.

Revisions

British Standards are updated by amendment or revision. Users of British Standards should make sure that they possess the latest amendments or editions.

Any person who finds an inaccuracy or ambiguity while using this British Standard should notify BSI without delay so that the matter may be investigated swiftly.

BSI offers members an individual updating service called PLUS which ensures that subscribers automatically receive the latest editions of standards.

Buying British Standards

Orders for all British Standard publications should be addressed to the Sales Department at Milton Keynes.

Information on standards

BSI provides a wide range of information on national, European and international standards through its Library, the Standardline Database, the BSI Information Technology Service (BITS) and its Technical Help to Exporters Service. Contact Enquiry Section at Milton Keynes: Tel: 0908 221166.

Subscribing members of BSI are kept up to date with standards developments and receive substantial discounts on the purchase price of standards. For details of these and other benefits contact the Manager, Membership Development at Milton Keynes: Tel: 0908 220022.

Copyright

Copyright subsists in all BSI publications. No part of this publication may be reproduced in any form without the prior permission in writing of BSI. This does not preclude the free use, in the course of implementing the standard, of details such as symbols and size, type or grade designations. Enquiries about copyright should be made to the Copyright Manager, Marketing at Milton Keynes.

BSI
2 Park Street
London
W1A 2BS

BSI
Linford Wood
Milton Keynes
MK14 6LE