

Testing of valves —

Part 1: Specification for production pressure testing requirements

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- Association of Bronze and Brass Founders
- Association of Hydraulic Equipment Manufacturers
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- Water Companies' Association

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Foreword

This Part of BS 6755 has been prepared under the direction of the Piping Systems Components Standards Committee. BS 6755 is published in two Parts:

- *Part 1: Specification for production pressure testing requirements;*
- *Part 2:¹⁾ Specification for fire type-testing requirements.*

This Part of BS 6755 will supersede BS 5146-1 and BS 5146-2 and is related to ISO 5208-1982, published by the International Organization for Standardization (ISO), but is not equivalent in technical content. The main differences are as follows.

- a) Pressure test requirements specified in BS 5146-1 have been included in this Part of BS 6755 which are not specified in ISO 5208.
- b) More details of the test methods are given in this Part of BS 6755.
- c) Maximum allowable leakage rates for the seat and back seat tests are designated differently to ISO 5208 and BS 5146-2 and therefore a table of equivalent leakage rates is given in appendix A.
- d) The minimum durations for pressure tests do not necessarily comply with ISO 5208; the actual test durations are given in the valve product standards.
- e) For guidance, a table of test durations is given in appendix B and may be used where an appropriate valve product standard does not exist or where test times are not specified in a standard.
- f) For comparison and information, a table of equivalent sizes of valves having different ends is given in appendix C.

This Part of BS 6755 establishes the basic requirements and methods for the production pressure testing of valves. It revises the production pressure testing requirements specified in BS 5146-1:1974 and BS 5146-2:1984 both of which will eventually be superseded by this Part of BS 6755 and will be withdrawn. In the meantime valves should be tested, as appropriate, in accordance with either:

- 1) i) BS 5146-1:1974;
ii) BS 5146-2:1984;
iii) the requirements in the relevant valve product standard;
or
- 2) this Part of BS 6755.

It is the intention to refer to this Part of BS 6755 for production pressure testing in all the valve product standards listed in this foreword and this will be achieved either by revisions to existing standards or by amendments published to existing standards. It is expected that all valves will be required to be production pressure tested in accordance with this Part of BS 6755 within a date of 2 years of publication of this standard. Within this period BS 5146-2:1984 will be withdrawn and the production pressure testing requirements specified in BS 5146-1:1974 will be deleted together with clauses covering inspection requirements.

¹⁾ In preparation

It is intended that this Part of BS 6755 be used in conjunction with the appropriate valve product standard when specified wholly or in part only by the valve product standard or with a valve application standard, e.g. BS 759-1, when applicable. In particular, it applies when specified by any one of the following valve product standards:

BS 1414	BS 5153	BS 5159	BS 6364
BS 1868	BS 5154	BS 5160	
BS 1873	BS 5155	BS 5163	
BS 5150	BS 5156	BS 5351	
BS 5151	BS 5157	BS 5352	
BS 5152	BS 5158	BS 5353	

This Part of BS 6755 gives general test requirements: specific test requirements, such as test durations and permissible leakage rates, are or will be included in the valve product standards. In addition, it may be used for the pressure testing of valves not covered by product standards.

Throughout this standard all pressures specified are gauge pressures (in bar²⁾).

It has been assumed in the drafting of this Part of BS 6755 that the execution of its provisions is entrusted to appropriately qualified and experienced people because it calls for procedures that may be injurious to health if adequate precautions are not taken. It refers only to technical suitability and does not absolve the user from legal obligations relating to health and safety at any stage. This refers, in particular, to pneumatic testing (see D.2 and D.5) and attention is drawn to Guidance Note GS4, "Safety in pressure testing", produced by the Health and Safety Executive and published by HMSO.

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.

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

Summary of pages

This document comprises a front cover, an inside front cover, pages i to iv, pages 1 to 10, an inside back cover and a back cover.

This standard has been updated (see copyright date) and may have had amendments incorporated. This will be indicated in the amendment table on the inside front cover.

²⁾ 1 bar = 10⁵ N/m² = 10⁵ Pa.

