

Fire hydrant systems equipment —

Part 1: Specification for landing valves for wet risers

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The preparation of this British Standard was entrusted by the Fire Standards Committee (FSM/-) to Technical Committee FSM/6, upon which the following bodies were represented:

- Association of County Councils
- Association of Metropolitan Authorities
- British Coal
- British Fire Services' Association
- British Plastics Federation
- British Valve Manufacturers' Association Ltd.
- Chief and Assistant Chief Fire Officers' Association
- Convention of Scottish Local Authorities
- Copper Development Association
- Department of the Environment (Property Services Agency)
- Department of Transport (Marine Directorate)
- Fire Extinguishing Trades Association
- Fire Offices Committee
- Fire Protection Association
- Greater London Council
- Home Office
- Institution of Fire Engineers
- Ministry of Defence
- Royal Institute of British Architects

The following body was also represented in the drafting of the standard, through subcommittees and panels:

British Fire Protection Systems Association Ltd.

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Foreword

This revision of BS 5041-1 has been prepared under the direction of the Fire Standards Committee and supersedes BS 5041-1:1975, which is withdrawn. It specifies requirements for valves suitable for use on wet risers of either high or low pressure installations. BS 5041-1:1975 was restricted to copper alloy globe valves but in this revision requirements for diaphragm valves are included.

The subjects of the other Parts in the BS 5041 series of general specifications for fire hydrant systems equipment are as follows.

- *Part 2: Landing valves for dry risers;*
- *Part 3: Inlet breechings for dry riser inlets;*
- *Part 4: Boxes for landing valves for dry risers;*
- *Part 5: Boxes for foam inlets and dry riser inlets.*

These Parts give detailed requirements for most of the other special items required for wet and dry risers described in BS 5306-1.

In this standard metric values are given in SI units; for further information reference should be made to BS 3763. Some nominal bores and thread sizes are given in inches to accord with the standards referred to.

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.

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Summary of pages

This document comprises a front cover, an inside front cover, pages i and ii, 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.

Section 1. General

1 Scope

This Part of BS 5041 specifies requirements for copper alloy globe valves generally complying with BS 5154 and diaphragm valves generally complying with BS 5156, both suitable for installation as landing valves on wet risers. The valves have screwed or flanged inlets and also delivery hose connections complying with BS 336. This standard covers valves of nominal pressure (PN) designations 15 bar and 20 bar and nominal inlet sizes DN 40 to DN 65 for flanged ends and 1½ and 2½ for screwed ends.

NOTE 1 Unless otherwise stated all pressures are gauge pressures expressed in bar: 1 bar = $10^5 \text{ N/m}^2 = 100 \text{ kPa}$.

NOTE 2 Information which the purchaser is recommended to supply to the manufacturer is given in Appendix B and does not form part of the specification.

NOTE 3 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 5041, the following definitions apply.

2.1

wet riser (wet rising main)

a vertical pipe installed in a building for fire fighting purposes, permanently charged with water from a pressurized supply, and fitted with valves and outlet connections at specified points

2.2

landing valve

an assembly comprising a valve and outlet connection from a wet or dry riser

3 Valve types

Valves, whether globe or diaphragm, shall be of the horizontal, bib-nosed, oblique or right-angle type, the general forms being illustrated in Figure 1.

4 Classification by pressure rating

4.1 General

Valves shall be classified as low pressure or high pressure according to the nominal inlet working pressure for which they are suitable.

4.2 Low pressure valves

Low pressure valves shall be suitable for use at nominal inlet pressures up to 15 bar.

4.3 High pressure valves

High pressure valves shall be suitable for use at nominal inlet pressures up to 20 bar.

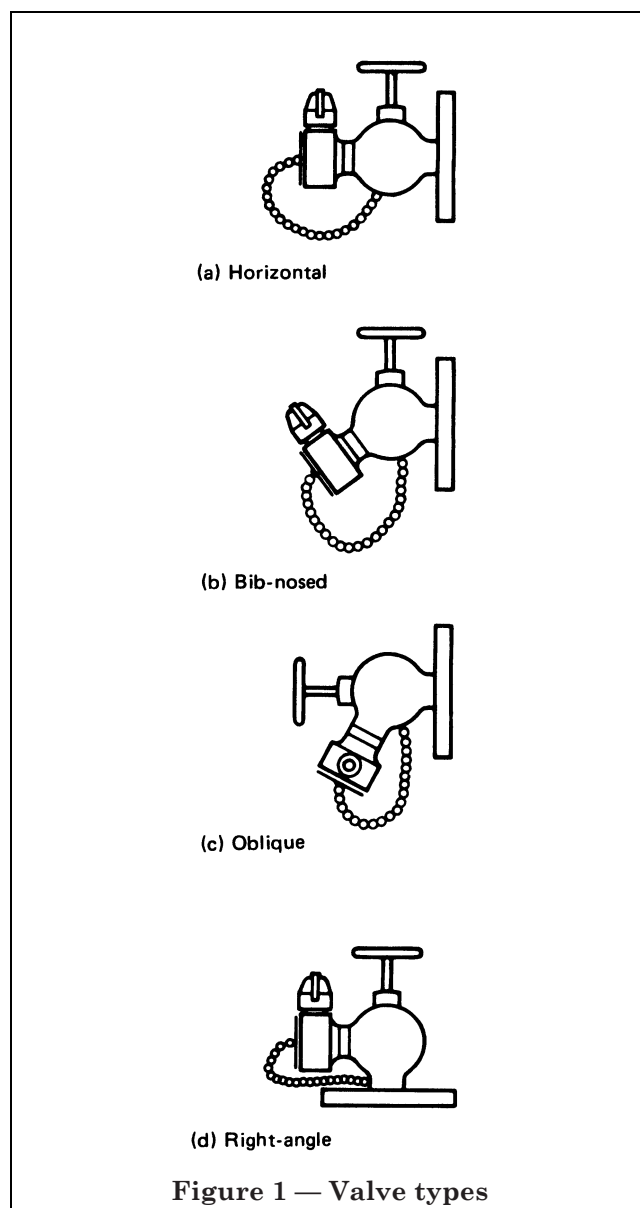


Figure 1 — Valve types