

Industrial valves — Protective caps for valves with flanged connections

ICS 23.060.01

National foreword

This British Standard is the UK implementation of EN 12351:2010. It supersedes BS EN 12351:1999 which is withdrawn.

The UK participation in its preparation was entrusted to Technical Committee PSE/18/1, Industrial valves, steam traps, actuators and safety devices against excessive pressure - Valves - Basic standards.

A list of organizations represented on this committee can be obtained on request to its secretary.

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Industrial valves - Protective caps for valves with flanged connections

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Industriearmaturen - Schutzkappen für Armaturen mit Flanschanschluß

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Foreword

This document (EN 12351:2010) has been prepared by Technical Committee CEN/TC 69 “Industrial valves”, the secretariat of which is held by AFNOR.

This European Standard shall be given the status of a national standard, either by publication of an identical text or by endorsement, at the latest by October 2010, and conflicting national standards shall be withdrawn at the latest by October 2010.

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1 Scope

This European Standard specifies protective caps for flanged valves with and without internal coating.

The use of protective caps according to this European Standard is limited to the protection during transport and storage to prevent:

- the entry of dirt;
- the damage of the connecting surfaces.

The protective caps do not protect against the consequences of improper handling.

This European Standard does not apply to protective caps for valves and pipe fittings with welded and threaded ends.

NOTE It is possible to use these protective caps with flanged components other than valves.

2 Normative references

The following referenced documents are indispensable for the application of this document. For dated references, only the edition cited applies. For undated references, the latest edition of the referenced document (including any amendments) applies.

EN ISO 1043-1, *Plastics — Symbols and abbreviated terms — Part 1: Basic polymers and their special characteristics (ISO 1043-1:2001)*

ISO 1629, *Rubbers and latices — Nomenclature*

3 Requirements

3.1 The protective caps shall completely cover the port and the sealing surface of the flange and shall prevent damage.

The design of caps shall be such that when fitted to flanges, they remain attached during normal handling, transport and storage until they are removed before installation of the valve.

3.2 The protective caps shall fit so tightly that no foreign matter and coarse dirt can penetrate which would impede the correct function of the protected part.

Caps shall not be watertight or airtight.

3.3 The protective caps shall be designed in such a way that the installation of the valve without removal of the protective cap shall be impossible.

3.4 It is recommended that bright signal colours be used, preferably yellow or red. If a particular colour is required it shall be indicated in the order.

4 Design

The design may be at the option of the manufacturer and shall comply with the requirements of Clause 3. Examples of protective caps are shown in Annex A and are provided for information only.

5 Materials

Materials shall be compatible with the material of the valve and shall not cause contamination or corrosion of the valve.

NOTE In the range of DN 10 to DN 300 plastic or rubber materials are preferred.

6 Marking

Caps which are intended to be re-used shall be marked as follows:

- reference to this European Standard, i.e. EN 12351;
- either DN or NPS;
- either PN or Class;
- material (for recycle purposes) according to EN ISO 1043-1 and ISO 1629.

NOTE Protective caps which are used at different nominal pressures (PN) can be marked with the nominal pressure (PN) range instead of one particular nominal pressure (PN).

Annex A (informative)

Design of protective caps for valves with flanged connections

Annex A contains examples of acceptable cap designs.

It does not exclude the use of alternative designs which meet the requirements of this European Standard.

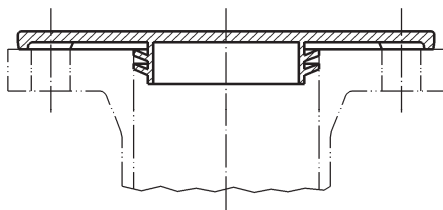
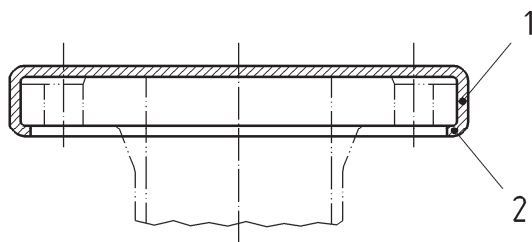


Figure A.1 — Design with orifice plug



Key

- 1 rim
- 2 edge

Figure A.2 — Design with rim and edge

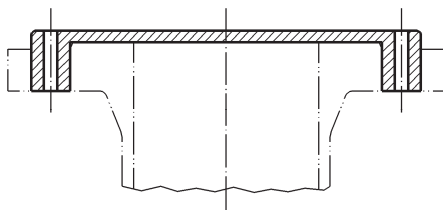


Figure A.3 — Design with plugs for the bolt holes

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