
**Gas cylinders — Valve protection caps
and valve guards — Design, construction
and tests**

*Bouteilles à gaz — Chapeaux fermés et chapeaux ouverts de protection
des robinets — Conception, construction et essais*



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Published in Switzerland

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Foreword

ISO (the International Organization for Standardization) is a worldwide federation of national standards bodies (ISO member bodies). The work of preparing International Standards is normally carried out through ISO technical committees. Each member body interested in a subject for which a technical committee has been established has the right to be represented on that committee. International organizations, governmental and non-governmental, in liaison with ISO, also take part in the work. ISO collaborates closely with the International Electrotechnical Commission (IEC) on all matters of electrotechnical standardization.

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The main task of technical committees is to prepare International Standards. Draft International Standards adopted by the technical committees are circulated to the member bodies for voting. Publication as an International Standard requires approval by at least 75 % of the member bodies casting a vote.

Attention is drawn to the possibility that some of the elements of this document may be the subject of patent rights. ISO shall not be held responsible for identifying any or all such patent rights.

ISO 11117 was prepared by Technical Committee ISO/TC 58, *Gas cylinders*, Subcommittee SC 2, *Cylinder fittings*.

This second edition cancels and replaces the first edition (ISO 11117:1998) which has been technically revised.

Introduction

This International Standard covers devices intended for the protection of gas cylinder valves, where such protection is required, for example, where the valve is unable to meet the impact test requirements of the relevant valve standard to allow safe transport, handling and storage without such protection.

This International Standard specifies the principal dimensions, requirements for fitment and drop test procedure, to confirm the provision of adequate valve protection, in the event of the occurrence of a cylinder toppling from its base.

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Gas cylinders — Valve protection caps and valve guards — Design, construction and tests

1 Scope

This International Standard specifies the requirements for valve protection caps and guards for gas cylinders.

This International Standard defines tests for checking the mechanical strength and physical properties of the valve protection cap or valve guard.

This International Standard applies to protection devices for valves used on cylinders for liquefied, dissolved or compressed gases. This International Standard excludes protection devices for cylinders with a water capacity of 5 l or less and cylinders whereby the protection device is fixed by means of lugs welded or brazed to the cylinder, or is welded or brazed directly to the cylinder. This International Standard does not cover valve protection for breathing apparatus cylinders.

This International Standard does not specify all the requirements that may be necessary to enable the valve protection device to be used for lifting the cylinder.

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.

ISO 10297, *Transportable gas cylinders — Cylinder valves — Specification and type testing*

ISO 14245, *Gas cylinders — Specifications and testing of LPG cylinder valves — Self-closing*

ISO 15995, *Gas cylinders — Specifications and testing of LPG cylinder valves — Manually operated*

3 Terms and definitions

For the purposes of this document, the following terms and definitions apply.

3.1

valve protection cap

device securely fixed over the valve during handling, transportation and storage and which is removed for access to the valve

3.2

valve guard

device protecting the valve during handling, transportation, storage

NOTE The guard need not be removed to provide access to the valve.