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## Gas cylinders — Self-closing cylinder valves — Specification and type testing

*Bouteilles à gaz — Robinets de bouteilles équipés de clapets auto-obturants — Spécifications et essais de type*



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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.

The procedures used to develop this document and those intended for its further maintenance are described in the ISO/IEC Directives, Part 1. In particular the different approval criteria needed for the different types of ISO documents should be noted. This document was drafted in accordance with the editorial rules of the ISO/IEC Directives, Part 2 (see [www.iso.org/directives](http://www.iso.org/directives)).

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For an explanation on the voluntary nature of standards, the meaning of ISO specific terms and expressions related to conformity assessment, as well as information about ISO's adherence to the World Trade Organization (WTO) principles in the Technical Barriers to Trade (TBT) see the following URL: [www.iso.org/iso/foreword.html](http://www.iso.org/iso/foreword.html).

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

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## Introduction

This document covers the function of a self-closing cylinder valve as a closure (defined by the UN Model Regulations). Additional features of self-closing cylinder valves (e.g. pressure relief devices) might be covered by other standards and/or regulations.

Self-closing cylinder valves conforming to this document can be expected to perform satisfactorily under normal service conditions.

This document pays particular attention to:

- a) suitability of materials;
- b) safety (mechanical strength, impact strength, endurance, leak tightness, resistance to ignition, resistance to acetylene flashback);
- c) testing;
- d) marking;
- e) manufacturing tests and examinations.

In this document, the unit bar is used due to its universal use in the field of technical gases. It should, however, be noted that bar is not an SI unit, and that the corresponding SI unit for pressure is Pa ( $1 \text{ bar} = 10^5 \text{ Pa} = 10^5 \text{ N/m}^2$ ).

Pressure values in this document are given as gauge pressure (pressure exceeding atmospheric pressure) unless noted otherwise.