ICS 23.020.30 SLOVENSKÁ TECHNICKÁ NORMA Máj 2018

| STN | **Fľaše na plyny<br>Samouzatváracie ventily na fľaše<br>Špecifikácia a typové skúšky (ISO 17879: 2017)** | **STN<br>EN ISO 17879<br><br>07 8647** |
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Gas cylinders - Self-closing cylinder valves - Specification and type testing (ISO 17879:2017)

Táto norma obsahuje anglickú verziu európskej normy.
This standard includes the English version of the European Standard.

Táto norma bola oznámená vo Vestníku ÚNMS SR č. 04/18

Obsahuje: EN ISO 17879:2017, ISO 17879:2017

**126576**

EUROPEAN STANDARD

NORME EUROPÉENNE

EUROPÄISCHE NORM

# EN ISO 17879

August 2017

ICS 23.020.35

English Version

# Gas cylinders - Self-closing cylinder valves - Specification and type testing (ISO 17879:2017)

Bouteilles à gaz - Robinets de bouteilles équipés de clapets auto-obturants - Spécifications et essais de type (ISO 17879:2017)

Gasflaschen - Selbstschließende Flaschenventile - Spezifikation und Baumusterprüfung (ISO 17879:2017)

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**CEN-CENELEC Management Centre: Avenue Marnix 17, B-1000 Brussels**



Ref. No. EN ISO 17879:2017 E

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# European foreword

This document (EN ISO 17879:2017) has been prepared by Technical Committee ISO/TC 58 “Gas cylinders” in collaboration with Technical Committee CEN/TC 23 “Transportable gas cylinders” the secretariat of which is held by BSI.

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of an identical text or by endorsement, at the latest by February 2018, and conflicting national standards shall be withdrawn at the latest by February 2018.

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**Endorsement notice**

The text of ISO 17879:2017 has been approved by CEN as EN ISO 17879:2017 without any modification.

INTERNATIONAL STANDARD

**ISO 17879**

First edition
2017-07

# 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*

Reference number
ISO 17879:2017(E)

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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).

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Any trade name used in this document is information given for the convenience of users and does not constitute an endorsement.

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.

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

# 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 bar = $10^5$ Pa = $10^5$ N/$m^2$).

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

**INTERNATIONAL STANDARD** **ISO 17879:2017(E)**

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

## 1 Scope

This document specifies the design, type testing, marking and manufacturing tests and examinations requirements for self-closing cylinder valves intended to be fitted to refillable transportable gas cylinders which convey compressed, liquefied or dissolved gases.

NOTE 1 The main applications for such self-closing cylinder valves are in the calibration gas and beverage industries.

This document covers the function of a self-closing cylinder valve as a closure.

NOTE 2 Requirements for standard cylinder valves are given in ISO 10297. Requirements for quick-release cylinder valves are given in ISO 17871.

This document is not applicable to self-closing cylinder valves for cryogenic equipment, for portable fire extinguishers, or for liquefied petroleum gas (LPG).

NOTE 3 Requirements for valves for cryogenic vessels are specified in ISO 21011 and at a regional level, for example, in EN 1626. Requirements for valves for portable fire extinguishers at a regional level are specified, for example, in EN 3 series. Requirements for self-closing LPG cylinder valves are specified in ISO 14245.

NOTE 4 Additional requirements for pressure-relief devices might be specified in international/regional regulations/standards.

## 2 Normative references

The following documents are referred to in the text in such a way that some or all of their content constitutes requirements 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 10286, *Gas cylinders — Terminology*

ISO 10297:2014, *Gas cylinders — Cylinder valves — Specification and type testing*

ISO 10524-3, *Pressure regulators for use with medical gases — Part 3: Pressure regulators integrated with cylinder valves*

ISO 11114-1, *Gas cylinders — Compatibility of cylinder and valve materials with gas contents — Part 1: Metallic materials*

ISO 11114-2, *Gas cylinders — Compatibility of cylinder and valve materials with gas contents — Part 2: Non-metallic materials*

ISO 13341, *Gas cylinders — Fitting of valves to gas cylinders*

ISO 14246, *Gas cylinders — Cylinder valves — Manufacturing tests and examinations*

ISO 22435, *Gas cylinders — Cylinder valves with integrated pressure regulators — Specification and type testing*



 