

Industrial valves - Isolating valves for low-temperature applications - Part 2: Type testing (ISO 28921-2:2015)

EESTI STANDARDI EESSÕNA

NATIONAL FOREWORD

See Eesti standard EVS-EN ISO 28921-2:2017 sisaldab Euroopa standardi EN ISO 28921-2:2017 ingliskeelset teksti.	This Estonian standard EVS-EN ISO 28921-2:2017 consists of the English text of the European standard EN ISO 28921-2:2017.
Standard on jõustunud sellekohase teate avaldamisega EVS Teatajas	This standard has been endorsed with a notification published in the official bulletin of the Estonian Centre for Standardisation.
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English Version

Industrial valves - Isolating valves for low-temperature applications - Part 2: Type testing (ISO 28921-2:2015)

Robinetterie industrielle - Robinets d'isolement pour application à basses températures - Partie 2: Essais de type (ISO 28921-2:2015)

Industriearmaturen - Absperrventile für die Anwendung im Niedertemperaturbereich - Teil 2: Typprüfung (ISO 28921-2:2015)

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European foreword

The text of ISO 28921-2:2015 has been prepared by Technical Committee ISO/TC 153 “Valves” of the International Organization for Standardization (ISO) and has been taken over as EN ISO 28921-2:2017 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of an identical text or by endorsement, at the latest by August 2017, and conflicting national standards shall be withdrawn at the latest by August 2017.

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

EN ISO 28921-1 and EN ISO 28921-2 supersede EN 12567:2000.

According to the CEN-CENELEC Internal Regulations, the national standards organizations of the following countries are bound to implement this European Standard: Austria, Belgium, Bulgaria, Croatia, Cyprus, Czech Republic, Denmark, Estonia, Finland, Former Yugoslav Republic of Macedonia, France, Germany, Greece, Hungary, Iceland, Ireland, Italy, Latvia, Lithuania, Luxembourg, Malta, Netherlands, Norway, Poland, Portugal, Romania, Serbia, Slovakia, Slovenia, Spain, Sweden, Switzerland, Turkey and the United Kingdom.

Endorsement notice

The text of ISO 28921-2:2015 has been approved by CEN as EN ISO 28921-2:2017 without any modification.

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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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For an explanation on the meaning of ISO specific terms and expressions related to conformity assessment, as well as information about ISO's adherence to the WTO principles in the Technical Barriers to Trade (TBT) see the following URL: [Foreword - Supplementary information](#)

The committee responsible for this document is Technical Committee ISO/TC 153, *Valves*, Subcommittee SC 1, *Design, manufacture, marking and testing*.

ISO 28921 consists of the following parts, under the general title *Industrial valves — Isolating valves for low-temperature applications*:

- *Part 1: Design, manufacturing and production testing*
- *Part 2: Type testing*

Industrial valves — Isolating valves for low-temperature applications —

Part 2: Type testing

WARNING — Persons using this International Standard should be familiar with normal laboratory practice. This International Standard does not purport to address all of the safety issues, if any, associated with its use. It is the responsibility of the user to establish appropriate safety and health practices and to ensure compliance with any national regulatory requirements.

1 Scope

This part of ISO 28921 specifies requirements for the type testing of isolating valves for low-temperature applications to verify the performance of valves at a low temperature from $-50\text{ }^{\circ}\text{C}$ down to $-196\text{ }^{\circ}\text{C}$.

NOTE Nominal sizes (DN), nominal pipe sizes (NPS), nominal pressure (PN) and Classes are covered in ISO 28921-1.

This part of ISO 28921 does not evaluate valve actuators unless they are integral part of the valve. Valves during testing can be operated manually or an actuator can be used during the testing. The effect of cold gas vapours during testing is taken into consideration in particular if the actuator is mounted directly over the test stand with the cold gases engulfing the actuator.

This part of ISO 28921 does not apply to valves for cryogenic services, designed in accordance with ISO 21011, used with cryogenic vessels.

2 Normative references

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

ISO 5208, *Industrial valves — Pressure testing of metallic valves*

ISO 28921-1, *Industrial valves — Isolating valves for low-temperature applications — Part 1: Design, manufacturing and production testing*

ASME B31.3, *Process Piping*

EN 13480-2, *Metallic industrial piping — Part 2: Materials*

3 Terms and definitions

For the purposes of this document, the terms and definitions given in ISO 28921-1 and the following apply.

3.1

symmetric seated valve

valve with an internal construction which has a plane of symmetry perpendicular to the axis of the body ends

Note 1 to entry: This is a valve where both seat sealing elements are identical.