

Industrial valves - Part-turn actuator attachments (ISO 5211:2017)

EESTI STANDARDI EESSÕNA

NATIONAL FOREWORD

See Eesti standard EVS-EN ISO 5211:2017 sisaldab Euroopa standardi EN ISO 5211:2017 ingliskeelset teksti.	This Estonian standard EVS-EN ISO 5211:2017 consists of the English text of the European standard EN ISO 5211:2017.
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 - Part-turn actuator attachments (ISO 5211:2017)

Robinetterie industrielle - Raccordement des actionneurs à fraction de tour (ISO 5211:2017)

Industriearmaturen - Anschlüsse von Schwenkantrieben (ISO 5211:2017)

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COMITÉ EUROPÉEN DE NORMALISATION
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European foreword

This document (EN ISO 5211:2017) has been prepared by Technical Committee ISO/TC 153 “Valves” in collaboration with 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of an identical text or by endorsement, at the latest by October 2017, and conflicting national standards shall be withdrawn at the latest by October 2017.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.

This document supersedes EN ISO 5211:2001.

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 5211:2017 has been approved by CEN as EN ISO 5211:2017 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 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 153, *Valves*.

This second edition cancels and replaces the first edition (ISO 5211:2001), which has been technically revised with the following changes:

- a) introduction of new flange sizes;
- b) introduction of improved flat head;
- c) introduction of involute spline;
- d) introduction of bi-square;
- e) adjustment of [Clause 6](#) on designation;
- f) positions of 180° keys on the driven component.

Introduction

The purpose of this document is to establish certain basic requirements for the attachment of part-turn actuators, in order to define the interface between actuator and valve.

This document has, in general, to be considered in conjunction with the specific requirements which may be agreed between the parties concerned.

Industrial valves — Part-turn actuator attachments

1 Scope

This document specifies requirements for the attachment of part-turn actuators, with or without gearboxes, to industrial valves.

The attachment of part-turn actuators to control valves in accordance with the requirements of this document is subject to an agreement between the supplier and the purchaser.

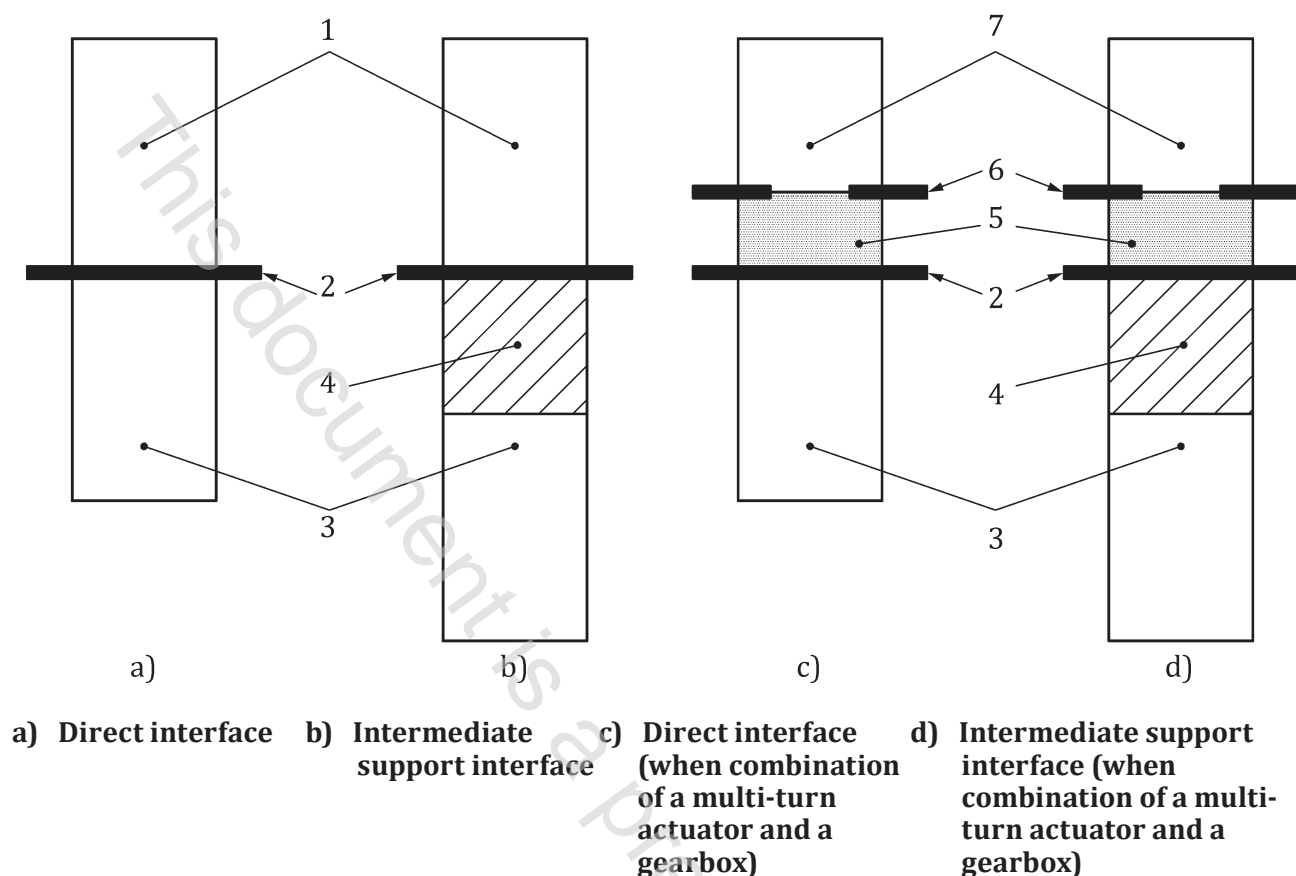
This document specifies:

- flange dimensions necessary for the attachment of part-turn actuators to industrial valves [see [Figures 1 a\)](#) and [1 c\)](#)] or to intermediate supports [see [Figures 1 b\)](#) and [1 d\)](#)];
- driving component dimensions of part-turn actuators necessary to attach them to the driven components;
- reference values for torques for interfaces and for couplings having the dimensions specified in this document.

The attachment of the intermediate support to the valve is out of the scope of this document.

NOTE 1 In this document, the term “valve” may also be understood to include “valve with an intermediate support” [see [Figure 1 b\)](#)].

NOTE 2 When a combination of a multi-turn actuator and separate part-turn gearbox is coupled to form a part-turn actuator, the multi-turn attachment to the gearbox is in accordance with ISO 5210:2017, Figures 1 c) and 1 d). A combination of a multi-turn actuator with integral part-turn gearbox supplied as a part-turn actuator is in accordance with [Figures 1a\)](#) and [1b\)](#).



Key

- | | | | |
|---|--------------------------|---|--------------------------|
| 1 | part-turn actuator | 5 | gearbox |
| 2 | interface (see ISO 5211) | 6 | interface (see ISO 5210) |
| 3 | valve | 7 | multi-turn actuator |
| 4 | intermediate support | | |

Figure 1 — Interface between part-turn actuator and valve

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 273, *Fasteners — Clearance holes for bolts and screws*

ISO 4156-1, *Straight cylindrical involute splines — Metric module, side fit — Part 1: Generalities*

3 Terms and definitions

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

ISO and IEC maintain terminological databases for use in standardization at the following addresses:

- IEC Electropedia: available at <http://www.electropedia.org/>
- ISO Online browsing platform: available at <http://www.iso.org/obp>