SLOVENSKI STANDARD
oSIST prEN ISO 5210:2016

01-marec-2016

Industrijski ventili - Priključki vrtilnih pogonov na ventilih (ISO/DIS 5210:2016)

Industrial valves - Multi-turn valve actuator attachments (ISO/DIS 5210:2016)

Industriearmaturen - Anschlüsse von Drehantrieben für Armaturen (ISO/DIS 5210:2016)

Robinetterie industrielle - Raccordement des actionneurs multitours aux appareils de robinetterie (ISO/DIS 5210:2016)

Ta slovenski standard je istoveten z: **prEN ISO 5210**

ICS:

23.060.01	Ventili na splošno	Valves in general

oSIST prEN ISO 5210:2016 **en,fr,de**

DRAFT INTERNATIONAL STANDARD
ISO/DIS 5210

ISO/TC **153**

Secretariat: **AFNOR**

Voting begins on:
2016-01-28

Voting terminates on:
2016-04-28

Industrial valves — Multi-turn valve actuator attachments

Robinetterie industrielle — Raccordement des actionneurs multitours aux appareils de robinetterie

ICS: 23.060.01

ISO/CEN PARALLEL PROCESSING

This draft has been developed within the International Organization for Standardization (ISO), and processed under the **ISO lead** mode of collaboration as defined in the Vienna Agreement.

This draft is hereby submitted to the ISO member bodies and to the CEN member bodies for a parallel three month enquiry.

To expedite distribution, this document is circulated as received from the committee secretariat. ISO Central Secretariat work of editing and text composition will be undertaken at publication stage.

Reference number
ISO/DIS 5210:2016(E)

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ISO copyright office
Ch. de Blandonnet 8 • CP 401
CH-1214 Vernier, Geneva, Switzerland
Tel. +41 22 749 01 11
Fax +41 22 749 09 47
copyright@iso.org
www.iso.org

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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).

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. Details of any patent rights identified during the development of the document will be in the Introduction and/or on the ISO list of patent declarations received (see www.iso.org/patents).

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 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 ISO/153, *Valves*.

This second edition cancels and replaces the first edition (ISO 5210:1996), which has been technically revised with the following changes:

a) extension of flange sizes;

b) introduction of groups C and D for assemblies capable of transmitting torque, in 7.4 and 7.5;

c) introduction of linear actuator in 7.6.

Introduction

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

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

Industrial valves — Multi-turn valve actuator attachments

1 Scope

This International Standard specifies the requirements for the attachment of multi-turn actuators to valves.

Throughout this International Standard, “actuator” may be understood as “actuator and/or gearbox”.

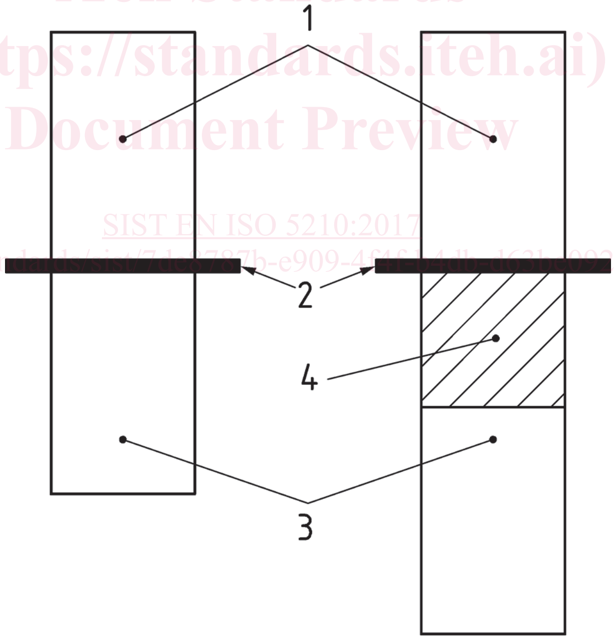
It specifies:

— flange dimensions necessary for the attachment of part-turn actuators to industrial valves [see Figure 1 a)] or to intermediate supports [see Figure 1 b)];

— those driving component dimensions of actuators which are necessary to attach them to the driven components;

— reference values for torque and thrust for flanges having the dimensions specified in this International Standard.

NOTE In this International standard the term “valve” may also be understood to include “valve with an intermediate support” [see Figure 1 b)].



a) b)

a) Direct interface b) Intermediate support interface

Key

1 multi-turn actuator

2 interface ISO 5210

3 Valve

4 intermediate support

Figure 1 — Interface between multi-turn actuator and valve

2 Normative references

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

3 Terms and definitions

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

3.1
actuator
any device designed for attachment to a general purpose industrial valve in order to provide for the operation of the valve

Note 1 to entry: The device is designed to operate using motive energy which may be electrical, pneumatic, hydraulic, manual, etc., or a combination of these. Movement is limited by travel, torque and/or thrust.

3.2
multi-turn actuator
actuator which transmits torque to the valve for at least one revolution and may be capable of withstanding thrust

3.3
torque
turning moment transmitted through the mounting flanges and couplings

Note 1 to entry: It is expressed in newton metres.

3.4
thrust
axial force transmitted through the mounting flanges and couplings

Note 1 to entry: It is expressed in kilonewtons.

4 Maximum torques and thrusts

The torque and thrust shall comply with the values listed in Table 1 which represent the maximum torques and thrusts which can be transmitted simultaneously through the mounting flanges and couplings. They are based upon specified criteria.

Table 1 — Maximum torque and thrust values

Flange type	Torque Nm	Thrust kN
F05	20	10
F07	40	20
F10	100	40
F12	250	70
F14	400	100
F16	700	150
F25	1200	200
F30	2500	325