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## **EESTI STANDARDI EESSÕNA**

## **NATIONAL FOREWORD**

Käesolev Eesti standard EVS-EN ISO 5211:2001 sisaldab Euroopa standardi EN ISO 5211:2001 ingliskeelset teksti.

This Estonian standard EVS-EN ISO 5211:2001 consists of the English text of the European standard EN ISO 5211:2001.

Käesolev dokument on jõustatud 19.10.2001 ja selle kohta on avaldatud teade Eesti standardiorganisatsiooni ametlikus väljaandes.

This document is endorsed on 19.10.2001 with the notification being published in the official publication of the Estonian national standardisation organisation.

Standard on kättesaadav Eesti standardiorganisatsioonist.

The standard is available from Estonian standardisation organisation.

## Käsitlusala:

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

## Scope:

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

ICS 23.060.01

**Võtmesõnad:** designation, dimensions, industrial valves, junctions, servomotors, specifications, valves

# **EUROPEAN STANDARD** NORME EUROPÉENNE EUROPÄISCHE NORM

**EN ISO 5211** 

February 2001

ICS 23.060.01

## **English version**

## Industrial valves

Part-turn actuator attachments (ISO 5211: 2001)

Robinetterie industrielle - Raccordement des actionneurs à fraction de tour (ISO 5211: 2001)

Industriearmaturen - Anschlüsse von Schwenkantrieben (ISO 5211 : 2001)

This European Standard was approved by CEN on 2000-12-07.

CEN members are bound to comply with the CEN/CENELEC Internal Regulations which stipulate the conditions for giving this European Standard the status of a national standard without any alteration.

Up-to-date lists and bibliographical references concerning such national standards may be obtained on application to the Management Centre or to any CEN member.

The European Standards exist in three official versions (English, French, German). A version in any other language made by translation under the responsibility of a CEN member into its own language and notified to the Management Centre has the same status as the official versions.

CEN members are the national standards bodies of Austria, Belgium, the Czech Republic, Denmark, Finland, France, Germany, Greece, Iceland, Ireland, Italy, Luxembourg, the Netherlands, Norway, Portugal, Spain, Sweden, Switzerland, and the United Kingdom.

European Committee for Standardization Comité Européen de Normalisation Europäisches Komitee für Normung

Management Centre: rue de Stassart 36, B-1050 Brussels

## **Contents**

		Page
Foreword		2
1	Scope	3
2	Normative references	4
3	Terms and definitions	4
4	Maximum flange torques	4
5	Flange dimensions	
6	Designation	7
7	Dimensions and torques	8
7.1	General	8
7.2	Drive by kev(s)	8
7.3	Drive by parallel or diagonal square head	11
7.4	Drive by parallel or diagonal square head  Drive by flat head	12
8	Position of driven components at interface below part-turn actuator	13
8.1	Drive by key(s)	13
8.2	Drive by parallel or diagonal square head	
8.3	Drive by key(s) Drive by parallel or diagonal square head Drive by flat head	15
Bibliography		15

## **Foreword**

The text of EN ISO 5211:2001 has been prepared by Technical Committee CEN/TC 69 "Industrial valves", the secretariat of which is held by AFNOR, in collaboration with Technical Committee ISO/TC 153 "Valves".

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 2001, and conflicting national standards shall be withdrawn at the latest by August 2001.

This European Standard currently includes actuators with key(s), square and flat drives. Other types of drives may be included in the future.

This European Standard has been prepared under a mandate given to CEN by the European Commission and the European Free Trade Association. This European Standard is considered to be a supporting standard to those application and product standards which in themselves support an essential safety requirement of a New Approach Directive and which make reference to this European Standard.

According to the CEN/CENELEC Internal Regulations, the national standards organizations of the following countries are bound to implement this European Standard: Austria, Belgium, Czech Republic, Denmark, Finland, France, Germany, Greece, Iceland, Ireland, Italy, Luxembourg, Netherlands, Norway, Portugal, Spain, Sweden, Switzerland and the United Kingdom.

## 1 Scope

This European Standard 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 is in accordance with the requirements of this standard only when subject to an agreement between the supplier and the purchaser.

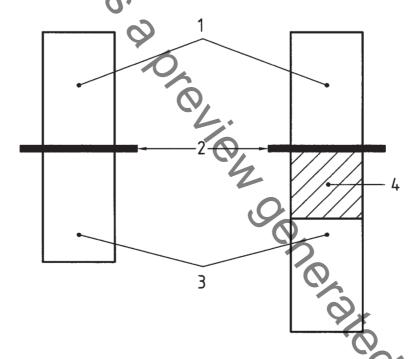
This standard specifies:

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

The attachment of the intermediate support to the valve is not the subject of this standard.

NOTE 1 In this standard the term "valve" may also be understood to include "valve with an intermediate support" (see Figure 1).

NOTE 2 When the part-turn actuator is a combination of a multi-turn actuator and a gearbox, the multi-turn actuator attachment to the gearbox should be in accordance with EN ISO 5210.



a) Direct interface

b) Intermediate support interface

### Key

- Part-turn actuator
- 2 Interface
- 3 Valve
- 4 Intermediate support

Figure 1 - Direct and intermediate support interfaces

EN ISO 5211: 2001

### 2 Normative references

This European Standard incorporates by dated or undated reference, provisions from other publications. These normative references are cited at the appropriate places in the text and the publications are listed hereafter. For dated references, subsequent amendments to or revisions of any of these publications apply to this European standard only when incorporate in it by amendments or revision. For undated references, the latest edition of the publication referred to applies (including amendments).

ISO 273, Fasteners - Clearance holes for bolts and screws.

ISO/TR 773, Rectangular or square parallel keys and their corresponding keyways (dimensions in millimetres).

## 3 Terms and definitions

For the purposes of this European Standard, the following terms and definitions apply:

### 3.1

#### actuator

any power operated device used to operate a valve. The device is designed to operate using motive energy which may be electrical, pneumatic, hydraulic, etc., or a combination of these. Movement is limited by travel, torque or thrust

#### 3.2

#### part-turn actuator

actuator which transmits torque to the valve for a rotation of one revolution or less. It does not have to be capable of withstanding axial thrust

#### 3.3

### gearbox

any mechanism designed to reduce the torque required to operate a valve

## 3.4

## torque

turning moment transmitted through the mounting flanges and connection components. It is expressed in Newton-metres (Nm)

## 4 Maximum flange torques

The maximum flange torque values listed in Table 1 give the maximum torques which can be transmitted through the mounting flange.