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Industrial valves - Actuators - Part 2: Electric actuators for industrial valves - Basic requirements

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English Version

Industrial valves - Actuators - Part 2: Electric actuators for industrial valves - Basic requirements

Robinetterie industrielle - Actionneurs - Partie 2:
Actionneurs électriques pour robinetterie industrielle -
Prescriptions de base

Industriearmaturen - Antriebe - Teil 2: Elektrische Antriebe
für Industriearmaturen - Grundanforderungen

This European Standard was approved by CEN on 12 September 2009.

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Foreword

This document (EN 15714-2:2009) has been prepared 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of an identical text or by endorsement, at the latest by April 2010, and conflicting national standards shall be withdrawn at the latest by April 2010.

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.

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, Cyprus, Czech Republic, Denmark, Estonia, Finland, France, Germany, Greece, Hungary, Iceland, Ireland, Italy, Latvia, Lithuania, Luxembourg, Malta, Netherlands, Norway, Poland, Portugal, Romania, Slovakia, Slovenia, Spain, Sweden, Switzerland and United Kingdom.

1 Scope

This document provides basic requirements for electric valve actuators, used for on-off and control valves. It includes guidelines for classification, design, enclosure and corrosion protection, and methods for conformity assessment.

Combinations of electric multi-turn actuators and gearboxes supplied by the actuator manufacturer are within the scope of this document. In all other cases this European Standard applies to the electric actuator only.

It does not cover: solenoid actuators, electro-hydraulic actuators and electric actuators which are integral in the design of valves.

Other requirements or conditions of use different from those indicated in this document should be agreed between the purchaser and the manufacturer/supplier, prior to order.

The terms and definitions applicable to this European Standard are given in EN 15714-1.

2 Normative references

The following referenced documents are indispensable for the application 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.

EN 12570, *Industrial valves — Method for sizing the operating element*

EN 60529, *Degrees of protection provided by enclosures (IP Code) (IEC 60529:1989)*

EN ISO 5210:1996, *Industrial valves — Multi-turn valve actuator attachments (ISO 5210:1991)*

EN ISO 5211, *Industrial valves — Part-turn valve actuator attachments (ISO 5211:2001)*

3 Classification/Designation

3.1 General

Electric valve actuators are classified per type, duty and action as detailed below.

3.2 Type: Part-turn, multi-turn or linear

3.2.1 Part-turn: An actuator which transmits torque to the valve for less than one revolution. It does not have to be capable of withstanding thrust. A combination of a multi-turn actuator plus a part-turn gearbox can be considered, for the sake of this European Standard, a part-turn actuator.

3.2.2 Multi-turn actuator: An actuator which transmits torque to the valve/gearbox for at least one revolution. It may be capable of withstanding thrust. A combination of a multi-turn actuator plus a multi-turn gearbox can be considered, for the sake of this European Standard, a multi-turn actuator.

3.2.3 Linear actuator: An actuator which transmits thrust to the valve for a defined linear stroke. A combination of a multi-turn actuator plus a linear drive can be considered, for the sake of this European Standard, a linear actuator.

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