

Industrial valves - Actuators - Part 5: Pneumatic linear actuators for industrial valves - Basic requirements

EESTI STANDARDI EESSÕNA

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English Version

Industrial valves - Actuators - Part 5: Pneumatic linear actuators for industrial valves - Basic requirements

Robinetterie industrielle - Actionneurs - Partie 5 :
Actionneurs linéaires pneumatiques - Prescriptions de
base

Industriearmaturen - Antriebe - Teil 5: Pneumatische
Antriebe - Grundanforderungen

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European foreword

This document (EN 15714-5:2022) 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of an identical text or by endorsement, at the latest by November 2022, and conflicting national standards shall be withdrawn at the latest by November 2022.

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1 Scope

This document provides basic requirements for piston type pneumatic linear actuators for industrial valve, both double acting and single acting, used for on-off and modulating control duties.

It includes criteria, method and guidelines for design, qualification, corrosion protection, control and testing.

It does not apply to diaphragm actuators and to pneumatic actuators which are integral parts of control valves.

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

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.

EN ISO 286-2, *Geometrical product specifications (GPS) - ISO code system for tolerances on linear sizes - Part 2: Tables of standard tolerance classes and limit deviations for holes and shafts (ISO 286-2)*

EN ISO 5210:2017, *Industrial valves - Multi-turn valve actuator attachments (ISO 5210:2017)*

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

EN 15714-1, *Industrial valves - Actuators - Part 1: Terminology and definitions*

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

ISO 5599-2, *Pneumatic fluid power — Five-port directional control valves — Part 2: Mounting interface surfaces with optional electrical connector*

ISO 8573-1:2010, *Compressed air — Part 1: Contaminants and purity classes*

3 Terms and definitions

For the purposes of this document, the terms and definitions given in EN 15714-1 and the following apply.

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

— ISO Online browsing platform: available at <https://www.iso.org/obp>

— IEC Electropedia: available at <https://www.electropedia.org/>

3.1

stroke

single and complete movement from one end of travel to the other

3.2

end stop

mechanical part, designed to stop the actuator drive train at an end position

Note 1 to entry: End stop can be fixed or adjustable.