



BSI Standards Publication

## Industrial valves — Actuators

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Part 3: Pneumatic part-turn actuators for industrial valves — Basic requirements

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## National foreword

This British Standard is the UK implementation of EN 15714-3:2022. It supersedes BS EN 15714-3:2009, which is withdrawn.

The UK participation in its preparation was entrusted to Technical Committee PSE/18/5, Industrial valves, steam traps, actuators and safety devices against excessive pressure - Valve actuators.

A list of organizations represented on this committee can be obtained on request to its committee manager.

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## Industrial valves - Actuators - Part 3: Pneumatic part-turn actuators for industrial valves - Basic requirements

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robinetterie industrielle - Prescriptions de base

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**CEN-CENELEC Management Centre: Rue de la Science 23, B-1040 Brussels**

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## European foreword

This document (EN 15714-3:2022) 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of an identical text or by endorsement, at the latest by April 2023, and conflicting national standards shall be withdrawn at the latest by April 2023.

Attention is drawn to the possibility that some of the elements of this document may be the subject of patent rights. CEN shall not be held responsible for identifying any or all such patent rights.

This document supersedes EN 15714-3:2009.

In comparison with the previous edition, the following technical modifications have been made:

- addition of new terms and definitions;
- improvement of the classification and the designation with on-off and modulating duty classification;
- addition of a new Clause 5 on motive energy;
- enhancement of the basic design requirements;
- modification of the conformity assessment with type test indications and control of production process.

Any feedback and questions on this document should be directed to the users’ national standards body. A complete listing of these bodies can be found on the CEN website.

According to the CEN-CENELEC Internal Regulations, the national standards organisations of the following countries are bound to implement this European Standard: Austria, Belgium, Bulgaria, Croatia, Cyprus, Czech Republic, Denmark, Estonia, Finland, France, Germany, Greece, Hungary, Iceland, Ireland, Italy, Latvia, Lithuania, Luxembourg, Malta, Netherlands, Norway, Poland, Portugal, Republic of North Macedonia, Romania, Serbia, Slovakia, Slovenia, Spain, Sweden, Switzerland, Türkiye and the United Kingdom.

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## 1 Scope

This document specifies basic requirements for pneumatic part-turn valve actuators, both double acting and single acting, used for on-off and modulating control duties.

It includes guidelines, recommendations and methods for enclosure and corrosion protection, control and testing.

It does not apply to pneumatic actuators which are integral parts of control valves and to pneumatic actuators designed for permanent immersion in fresh or sea water.

Other requirements, or conditions of use, different from those indicated in this document, are expected to be subject to negotiations, 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 5211, *Industrial valves - Part-turn actuator attachments (ISO 5211)*

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

#### **part-turn actuator**

actuator which transmits torque to the valve for less than one revolution; it does not have the capability of withstanding axial thrust

Note 1 to entry: Part-turn actuators are classified by action and duty.

### 3.2

#### **stroke**

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