

## **Industrial valves - Actuators - Part 1: Terminology and definitions**

This document is a preview generated by EVS

## EESTI STANDARDI EESSÕNA

## NATIONAL FOREWORD

Käesolev Eesti standard EVS-EN 15714-1:2009 sisaldab Euroopa standardi EN 15714-1:2009 ingliskeelset teksti.

Standard on kinnitatud Eesti Standardikeskuse 31.12.2009 käskkirjaga ja jõustub sellekohase teate avaldamisel EVS Teatajas.

Euroopa standardimisorganisatsioonide poolt rahvuslikele liikmetele Euroopa standardi teksti kättesaadavaks tegemise kuupäev on 21.10.2009.

Standard on kättesaadav Eesti standardiorganisatsioonist.

This Estonian standard EVS-EN 15714-1:2009 consists of the English text of the European standard EN 15714-1:2009.

This standard is ratified with the order of Estonian Centre for Standardisation dated 31.12.2009 and is endorsed with the notification published in the official bulletin of the Estonian national standardisation organisation.

Date of Availability of the European standard text 21.10.2009.

The standard is available from Estonian standardisation organisation.

ICS 01.040.23, 23.060.20

### Standardite reprodutseerimis- ja levitamiseõigus kuulub Eesti Standardikeskusele

Andmete paljundamine, taastekitamine, kopeerimine, salvestamine elektroonilisse süsteemi või edastamine ükskõik millises vormis või millisel teel on keelatud ilma Eesti Standardikeskuse poolt antud kirjaliku loata.

Kui Teil on küsimusi standardite autorikaitse kohta, palun võtke ühendust Eesti Standardikeskusega:  
Aru 10 Tallinn 10317 Eesti; [www.evs.ee](http://www.evs.ee); Telefon: 605 5050; E-post: [info@evs.ee](mailto:info@evs.ee)

### Right to reproduce and distribute Estonian Standards belongs to the Estonian Centre for Standardisation

No part of this publication may be reproduced or utilized in any form or by any means, electronic or mechanical, including photocopying, without permission in writing from Estonian Centre for Standardisation.

If you have any questions about standards copyright, please contact Estonian Centre for Standardisation:  
Aru str 10 Tallinn 10317 Estonia; [www.evs.ee](http://www.evs.ee); Phone: +372 605 5050; E-mail: [info@evs.ee](mailto:info@evs.ee)

ICS 01.040.23; 23.060.20

English Version

## Industrial valves - Actuators - Part 1: Terminology and definitions

Robinetterie industrielle - Actionneurs - Partie 1:  
Terminologie et définitions

Industriearmaturen - Antriebe - Teil 1: Begriffe und  
Definitionen

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

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 CEN Management Centre or to any CEN member.

This European Standard exists 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 CEN Management Centre has the same status as the official versions.

CEN members are the national standards bodies of 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.



EUROPEAN COMMITTEE FOR STANDARDIZATION  
COMITÉ EUROPÉEN DE NORMALISATION  
EUROPÄISCHES KOMITEE FÜR NORMUNG

**Management Centre: Avenue Marnix 17, B-1000 Brussels**

<b>Contents</b>		<b>Page</b>
Foreword.....		3
1	Scope .....	4
2	Normative references .....	4
3	Common terms and definitions used for electric, pneumatic and hydraulic valve actuators .....	4
4	Terms and definitions specific for pneumatic and/or hydraulic valve actuators .....	5
5	Terms and definitions specific for electric valve actuators .....	7
Bibliography.....		8

## Foreword

This document (EN 15714-1:2009) 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 defines specific terms and definitions used for industrial valve actuators not included in EN 736-2 and EN 736-3.

## 2 Normative references

Not applicable.

## 3 Common terms and definitions used for electric, pneumatic and hydraulic valve actuators

**Table 1 — Common terms and definitions**

Term	Definition
ambient temperature	environmental temperature of the location where the actuator is working
blistering	formation of bubbles or pimples on a coated surface, caused by the local loss of adhesion and lifting of the film from the underlying substrate (see EN ISO 4628-2)
emergency closing/opening	overriding operation allowing the actuator to be closed or opened under emergency conditions
emergency shut down ESD	specific function of an actuator designed to perform a pre-determined operation (open/close/stayput) in an emergency situation
end of travel	predefined position related to a fully open or a fully closed condition
end stop	mechanical part, designed to stop the actuator drive train at an end position
end torque/thrust	actuator maximum output torque/thrust available at the end of the stroke
fail-safe actuator	multi-turn, part-turn or linear actuator which is able to operate in a defined pre-determined way on loss of external power
fail-safe position	defined pre-determined position in which the actuator operates on loss of external power
indicating arrangement	device, externally visible, showing the position of the actuator/valve obturator
limit switch	contact that changes status when the stroking position of the actuator reaches a preset position
linear actuator	actuator which provides thrust for a defined linear stroke
manual override	device designed to operate manually the valve when required
motive energy	energy used to operate the actuator which can be electric, pneumatic or hydraulic
operating cycle	one complete opening and one complete closing stroke of the valve, including the stopping phases
operating/stroking/moving time	duration of a complete stroke of the actuator  NOTE For pneumatic and hydraulic actuators, the duration includes the pressurisation and/or de-pressurisation times and the movement of the actuator.