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I.S. EN 15714-1:2009

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

## I.S. EN 15714-1:2009

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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

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## **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of an identical text or by endorsement, at the latest by April 2010, and conflicting national standards shall be withdrawn at the latest by April 2010.

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## 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.

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