

Title (en)

METHOD FOR DETERMINING THE ARMATURE STROKE OF A MAGNETIC ACTUATOR

Title (de)

VERFAHREN ZUM ERMITTELN DES ANKERHUBS EINES MAGNETAKTORS

Title (fr)

PROCÉDÉ POUR DÉTERMINER LE TRAJET D'ARMATURE D'UN ACTIONNEUR MAGNÉTIQUE

Publication

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Application

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Abstract (en)

[origin: WO2016083050A1] The invention relates to a method for determining the armature stroke of a magnetic actuator which has at least one air gap and one armature, comprising the method steps: determining of a magnetic hysteresis curve (10) of the magnetic actuator, selecting of a curve region (20) in the magnetic hysteresis curve (10) which is characterised by a transition of the armature from a first stationary end position into a second stationary end position, determining of the magnetic energy state of the magnetic actuator in the second stationary end position of the armature on the basis of the profile of the selected curve region (20), producing of a curve region (22) in the interval of the selected curve region (20), wherein the produced curve region (22) simulates the magnetic actuator with the armature fixed in the first end position thereof, in order to determine a magnetic energy state of the magnetic actuator which corresponds thereto, and comparing of the two energy states of the magnetic actuator on the basis of the profiles of the selected curve region (20) and of the produced curve region (20) in order to determine the armature stroke on the basis thereof.

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