

Title (en)

COMPACT LINEAR SOLENOID WITH IMPROVED GEOMETRY OF MAGNETICALLY ACTIVE SURFACES

Title (de)

KOMPAKTE LINEARE MAGNETSPULE MIT VERBESSERTER GEOMETRIE DER MAGNETISCH AKTIVEN OBERFLÄCHEN

Title (fr)

SOLÉNOÏDE LINÉAIRE COMPACT À GÉOMÉTRIE AMÉLIORÉE DE SURFACES MAGNÉTIQUEMENT ACTIVES

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Application

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Abstract (en)

[origin: EP3422373A1] The object of the invention is a compact linear solenoid with the improved geometry of magnetically active surfaces. The geometry of the magnetically active surfaces is improved with the innovative shape of the plunger and/or base. Compared to a conventional solenoid of a conical type, the improved geometry of the invention provides for an increase in the performance of the solenoid in terms of higher actuating force, higher holding force, constancy or linearity of the course of the force or adjustment of the course of the force to a specific application at a limited consumption of electric power and limited dimensions of the solenoid. Furthermore, the geometry enables a stop of the movable assembly in the end position without a risk of latching. The solution further represents improvement in terms of resistance to vibrations, simplicity of production, robustness and deterministic operation, life span and possibility of series production.

IPC 8 full level

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