Title (en)

Double acting electromagnetic actuator

Title (de

Elektromechanischer Doppelhubmagnet

Title (fr)

Electro-aimant de commande à double effet

Publication

EP 0564794 B1 19960508 (DE)

Application

EP 93102605 A 19930219

Priority

DE 4208367 A 19920316

Abstract (en)

[origin: EP0564794A1] An electromechanical double-acting magnet (10) having an integrated movement measurement system (12) is proposed which is of small construction and manages with a low drive current while having a high dynamic range, in the case of a wet type of construction. The double-acting magnet (10) has an integral pressure tube (21), which comprises an armature tube (23), which support two coils (18, 19), and a retaining tube (24) which is connected in a sealed manner in an attachment point (42) and firmly to the armature tube (23) and which carries measurement coils (44) of the movement measurement system (12), which measurement coils (44) are protected by a sheath (46). The armature tube (23) has a centre piece (29), which conducts magnetic flux, between two magnetically non-conductive intermediate pieces (27, 28), and has a pressure tube part (26) which operates as a pull shoe (32) and through which the magnetic flux of the internal coil (19) passes, and in which the attachment point (42) is located, as a result of which a structural shape can be achieved which is particularly short axially. <IMAGE>

IPC 1-7

H01F 7/16

IPC 8 full level

G01B 7/00 (2006.01); H01F 7/16 (2006.01)

CPC (source: EP)

H01F 7/1607 (2013.01); H01F 2007/085 (2013.01); H01F 2007/1684 (2013.01); H01F 2007/1692 (2013.01)

Cited by

US7145424B2; WO2004102050A1

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DE FR GB IT

DOCDB simple family (publication)

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DOCDB simple family (application)

DE 4208367 A 19920316; DE 59302488 T 19930219; EP 93102605 A 19930219; JP 5330393 A 19930315