

Title (en)

LEVEL METERING DEVICE FOR A FUEL TANK OF A MOTOR VEHICLE

Title (de)

FÜLLSTANDSMESSVORRICHTUNG FÜR EINEN KRAFTSTOFFBEHÄLTER EINES KRAFTFAHRZEUGES

Title (fr)

DISPOSITIF DE MESURE DE NIVEAU DESTINE A UN RESERVOIR DE CARBURANT D'UN VEHICULE A MOTEUR

Publication

EP 0966655 A1 19991229 (DE)

Application

EP 98937410 A 19980626

Priority

- DE 9801746 W 19980626
- DE 19755056 A 19971211

Abstract (en)

[origin: DE19755056A1] The invention relates to a level metering device (2) comprising a metering tube (14) placed in a fuel tank (10). Said metering tube (14) is filled with a part of the fuel flow which is fed to the injection system (44) of the motor vehicle combustion engine (46) by a feed unit (40) placed in the fuel tank (10). A differential pressure sensor (24) is subjected to a hydrostatic pressure applied to the lower end (30) of the metering tube (14) at one metering input (26), and to a hydrostatic pressure applied to the bottom (16) of the fuel tank (10), at its other metering input (28). During operation of the feed unit (40), a fuel column of a known height (l_0) is defined in the metering tube (14) so that the output signal (u) of the differential pressure sensor (24) enables determination of the actual level ($h(t)$) of the fuel tank (10). The metering tube (14) has an opening (56) for lowering the level in the metering tube (14), adjacent to its lower end (30), when the feed unit (40) is stopped, until same level is defined in the metering tube and in the fuel tank (10) and until the offset of the differential pressure sensor (24) can be determined.

IPC 1-7

G01F 23/18

IPC 8 full level

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