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The invention relates to converters of consumption, in particular to rotor converts, and may be used on flowmeters, and in gastflow and fluid counters.

The converter consists of the body (3), the stator (2) and two sensitive rotor-elements (1) of octahedral form, disposed interperpendicularly. the position of one rotor in regard to the other is ensured by synchronizing pinions, disposed on the rotor shafts.

At the entry of the air working chamber of the converter situated in the body (3), it is installed a reduction device (4). The flow rate and the quantity of the medium, passing through the converter, is determined by the capacity of the measuring chamber (5).

The technical purpose of the invention is the reduction of errors in the measurement of small consumptions.

This purpose is realized by the fact that the profile of the working surfaces of the rotors (1) is determined by the equations:

$$Y_n = a_o + a_1 x + a^2 x^2 + a_3 x^3 + a^4 x^4 + a_5 x^5; \quad Y_k = B\sqrt{c - x^2} \ ,$$

where: x, Y_n, Y_k - the coordinates of the profile points of the working surface of each rotor,

$a_o, a_1, a_2, a_3, a_4, a_5$ - the coefficients of the equation, describing the lateral section of the working surface of the rotor profile;

b, c - the coefficients of the equation, describing the face section of the working surface of the rotor profile.

The profile of the stator (2) is determined in accordance with the geometrical parameters of the rotor (1) and it consists of arcs of different radii, which centers are situated on the big axle of the stator profile and they are disposed at a distance, equal to the half-sum of the big and the small semiaxle of the rotor.

Claims: 1
Drawings: 2