CLAIMS

1.- Double isolation for double chamber differential pressure meter for sealing a communication passage (5) between an axial fluid circulation conduit (2) which fluid is to be measured and an accessory chamber (6), there being arranged in the axial conduit (2) a plate (3) provided with an orifice (4) having a smaller section than said axial conduit (2) which can be extracted into the accessory chamber (6) to be removed without interrupting the flow of the fluid through the axial conduit (2), characterized in that in relation to the communication passage (5) there is arranged between the axial conduit (2) and the accessory chamber (6) a closure formed by two independent closure elements (8 and 9) which are included in respective housings (10 and 11) intersecting the passage (5) with the possibility of movement of each of said closure elements (8 and 9) in their respective housings (10 and 11) between a position in which they do not interfere with the aforementioned passage (5) and a position in which they interrupt said passage (5), establishing a dual closure between both closure elements (8 and 9) which determines a leak-tight seal for that passage (5).

2.- Double isolation for double chamber differential pressure meter according to claim 1, characterized in that the closure elements (8 and 9) have respective controls (12 and 13) located on the outside by means of which the movement of said closure elements (8 and 9) between their respective sealed and open positions for sealing and opening the passage (5) can be actuated.

CLAIMS

1. A double chamber differential pressure meter comprising:

an axial fluid circulation conduit adapted to allow a flow of a fluid to be measured, the axial fluid circulation conduit comprising a first cross-sectional area;

a plate adapted to fit in the axial fluid circulation conduit, the plate comprising an orifice having a second cross-sectional area smaller than the first cross-sectional area;

a chamber coupled to the axial fluid circulation conduit by a communication passage, the chamber being adapted to hold the plate, the communication passage being adapted to allow the plate to move between the axial fluid circulation conduit and the chamber, the chamber further comprising an opening adapted to allow the plate to be removed from the double chamber differential pressure meter;

first and second closure elements disposed between the axial fluid circulation conduit and the chamber, wherein:

the first closure element comprises a first housing and a first plate valve disposed in the first housing, the first housing comprising first and second openings defining a first portion of the communication passage, the first plate valve having a first side and a second side opposite the first side, the first plate valve adapted to linearly move from a first position within the first housing in which the first plate valve does not interfere with the communication passage to a second position within the first housing in which the first side of the first plate valve is adjacent to and covers the first opening and the second side of the first plate valve is adjacent to and covers the second opening[[s]], thereby interrupting the communication passage; and

the second closure element comprises a second housing and a second plate valve disposed in the second housing, the second housing comprising third and fourth openings defining a second portion of the communication passage, the second plate

valve having a third side and a fourth side opposite the third side, the second plate valve adapted to linearly move from a third position within the second housing in which the second plate valve does not interfere with the communication passage to a fourth position within the second housing in which the third side of the second plate valve is adjacent to and covers the third opening and the fourth side of the second plate valve is adjacent to and covers the fourth opening[[s]], thereby interrupting the communication passage.

2. The double chamber differential pressure meter according to claim 1, further comprising first and second controls adapted to actuate movement of with the first and second closure elements, respectively, between respective sealed and open positions for sealing and opening the communication passage.

3. The double chamber differential pressure meter according to claim 1, wherein the movement of the first and second closure elements to respective sealed positions is required to form a leak-tight seal.

4. The double chamber differential pressure meter according to claim 1, wherein:

the first housing includes a first wall in which the first opening is located and a second wall in which the second opening is located, the first wall being opposite the second wall;

the first plate valve fills a first volume extending from the first wall to the second wall when the first plate valve is in the first position;

the first plate valve fills a second volume extending from the first opening to the second opening when the first plate valve is in the second position;

the second housing includes a third wall in which the third opening is located and a fourth wall in which the fourth opening is located, the third wall being opposite the fourth wall;

the second plate valve fills a third volume extending from the third wall to the fourth wall when the second plate valve is in the third position; and

the second plate valve fills a fourth volume extending from the third opening to the fourth opening when the second plate valve is in the fourth position.