

"Check valve"**ABSTRACT**

A check valve (4), adapted to regulate the outflow of a fluid, comprising a valve body (8) delimiting an outflow chamber (12) extending from an inlet (16) to an outlet (20) of the valve (4), a shutter (24), housed in said outflow chamber (12), movable along an operating stroke (S) between an open position, in which it allows the outflow of fluid between the inlet (16) and the outlet (20), and a closed position in which it inhibits said fluid outflow, wherein the shutter (24) comprises at least one operating portion (36), made of ferromagnetic material.

The check valve (4) comprises means for generating a magnetic field (40) arranged on the valve body (8), outside said outflow chamber (12), so as to generate a magnetic field which influences the at least one operating portion (36) of the shutter (24) and not to be impacted by the flow of fluid passing through the outflow chamber (12), wherein the shutter (4) comprises a shutter body (44), spherical and hollow, having a plane of symmetry (M-M) perpendicular to said operating stroke (S), which solidly houses, therein, said operating portion (36), made of ferromagnetic material so as to be influenced by said means for generating a magnetic field (40) to move from the closed to the open position and vice versa. The shutter body (44) has a closing portion (48) configured to selectively occlude said inlet (16) when in the closed position, said closing portion (48) being comprised between the plane of symmetry (M-M) and said inlet (16) of the outflow chamber (12), wherein the valve body (8), inside said outflow chamber (12), is provided with a front shoulder (52),

arranged on the side of the inlet (16) and defining a closing end-stroke of the shutter (24), and with a rear shoulder (64), arranged on the side of the outlet (20) and defining an opening end-stroke of the shutter (24). The valve body (8) has a plurality of peripheral recesses (68) extending between the front shoulder (52) and the rear shoulder (64), so as to allow the outflow of fluid when the shutter (24) is in an at least partially open position.

[Figure 4]