

ABSTRACT

A valve member is allowed to come apart securely from an electrode even with a low fluid flow rate without affecting the returning operation of the valve member, thereby facilitating improvement in the reliability of fluid detection. A supply aperture 12 and a discharge aperture 15 of fluid are formed at a body 10 that has a fluid space E allowing the fluid to pass therethrough. A one electrode Da that includes a contact T is provided at an aperture edge 12a of the supply aperture 12 and/or a peripheral part 12b of an aperture edge 12 of the body 10. The body 10 is provided with another electrode Db, and stores a valve member 40 that is made up of a conductor and opens and closes the supply aperture 12, and a coil spring 41 that is made up of a conductor and urges the valve member 40. A guide member 50 made up of a conductor is attached onto the valve member 40. The guide member 50 is formed to secure a flow path of the fluid from the supply aperture 12 to the discharge aperture 15 while being slidable in the fluid space E, has a reception surface 51 facing one end face of the fluid space E while receiving the fluid from the supply aperture 12, and has a top surface 52 facing another end face of the fluid space.