

ABSTRACT

An orifice for a pressure-type flow rate controller, which can be produced by a simple method at a low cost, that provides a linearity – between the pressure P_1 on the upstream side of the orifice and the flow rate – over a wide range of the pressure ratio P_2/P_1 of the pressure P_2 on the downstream side of the orifice to the upstream pressure P_1 and that permits adjustment with ease of flow characteristics among a plurality of orifices. The orifice comprises an inlet taper 1 in the shape of a bugle and a short narrowed straight section 2 adjoining the inlet taper 1, both formed by cutting one opening end of a preliminary hole 6 made in an orifice plate D, and further comprises a short inner taper 3 and an enlarged straight section 4 connecting with the taper 3 which are formed by enlarging the preliminary hole 6 at the other opening end, the short inner taper 3 adjoining the narrowed straight section 2 on one side and neighboring the enlarged straight section 4 on the other side.