

ABSTRACT

A high-differential-pressure valve having a valve plug sliding in a cage to regulate quantity of fluid flowing through the valve by adjusting the aperture area of the numerous through
5 holes, has more than one through hole separated to each other in a cage 5 inserted in a valve plug chamber located between an inflow port and an outflow port. Each of the through holes has bending passages in planes of circular cylinders concentric with the axis of the cage, or the cage 5 is formed with more than one
10 circular cylinder connected to each other which are ditched with grooves on the surface, thus the fluid passages have a lot of turns which absorbs energy of the flowing high pressure fluid, so that noise and cavitation are efficiently reduced in the valve.