

ADVANCED FLUIDICS GATE VALVE WITH ACTIVE FLOW CONTROL FOR SUBSEA APPLICATIONS

Abstract:

A valve assembly (32) for use in a wellhead assembly that includes a valve body (36), a cavity (38) formed in the valve body (36), and a flow passage (34) through the valve body (36) that intersects the cavity (38). Also included is a gate (40) slidable in the cavity (38) between an open position and a closed position. A bore (42) is formed through the gate (40). A fluidic passage (44) is also formed through the gates that provides fluid communication between the bore (42) and an upstream side of the valve member. The fluidic passage (44) is formed so that when the gate (40) is being moved into the closed position, fluid upstream of the gate (40) enters the fluidic passage (44) and exits into the bore (42) to assist closing the valve.

Figure 2