

ABSTRACT

VALVE ASSEMBLY

Disclosed is a valve assembly for a fire suppression system, the valve assembly having: a valve armature having a top portion and a bottom portion spaced from the top portion along a longitudinal axis, the bottom portion including an armature cavity that includes a cavity inlet for receiving fluid and a cavity outlet proximate a bottom portion of the cavity for delivering fluid, a plunger slidable along the longitudinal axis within the armature cavity, between a closed state and an open state, wherein: in the closed state the plunger is at a predetermined bottom position in the armature cavity proximate the cavity outlet for fluidly sealing the cavity outlet; and in the open state the plunger is in a predetermined top position in the cavity distal the cavity outlet, and a monitoring system operatively connected to the valve armature, the monitoring system acoustically sensing whether the plunger is longitudinally misaligned.

[FIGURE 1]