

SPLIT GATE VALVE WITH BIASING MECHANISM

ABSTRACT

A system includes a split gate valve with first and second gate sections coupled together and configured to move together within a cavity of the split gate valve between an open position and a closed position. The split gate valve includes a rolling actuator to reduce friction and to convert a rotational input into a linear motion to move the first and second gate sections between the open and closed positions. The split gate valve also includes at least one expansion bar configured to bias the first and second gate sections from one another to seal against opposite seats of the split gate valve, wherein each expansion bar includes a spring mechanism configured to compress upon moving the first and second gate sections into and beyond the closed position. to prevent buckling of the expansion bar.