

Abstract

In combination with a gate valve comprising a valve body having an internal cavity extending between an inlet port and an outlet port, a bonnet mounted to the valve body and having an internal passageway in
5 communication with the cavity, a valve stem rotationally supported in the passageway, a handle connected to one end of the valve stem and a gate threadedly connected to the other end of the valve stem, the improvement comprising a first packing for sealing between the bonnet and the valve
10 stem to prevent pressure within the cavity from escaping through the passageway, a second packing for sealing between the bonnet and the valve stem to prevent pressure within the cavity from escaping through the passageway, the second packing being located between the first packing and the cavity, a bypass port extending between a first portion of the
15 passageway below the second packing and a second portion of the passageway above the second packing, and a bypass valve for selectively closing the bypass port such that the first packing contains the pressure when the bypass port is open and the second packing contains the pressure when the bypass port is closed.

This Sheet Has Been Replaced

