

ABSTRACT OF THE INVENTION

FLUID TRANSFER DEVICE

A disposable device for the sterile transfer of fluids, such as liquids or gases, includes a body, a bore formed through at least a portion of the interior of the body, and a linearly moveable plunger contained within the bore. The body is formed from a rotating section and a stationary section. Partial rotation of the rotating section around a portion of the stationary section and the plunger drives the plunger linearly within the bore, opening and closing the device. The plunger includes at least a first and a second opening, and a fluid channel in the interior of the plunger connecting the first and second openings forming a fluid pathway to downstream components when the device is open. A termination component at one end of the plunger connects to a downstream component. A flange at one end of the body attaches to an upstream component. When the device is closed, the upstream end of the plunger is in alignment with the upstream flange of the body, forming a steamable sterilized in place face and a sterile barrier.

Figure 1