

Pressurization system by a bladder accumulator (Plan 53B)

DESCRIPTION

Solution with accumulator and its elastomeric bladder pressurized by mean of nitrogen.

Barrier fluid circulation is promoted by mean the pumping ring integrated into seal design or through external circulating pump, necessary to remove the heat generated by the seal faces, using water or air heat exchanger (finned pipes or forced draft cooler). This solution must be used if no process fluid emissions to the atmosphere are permitted.



CONSTRUCTION FEATURES

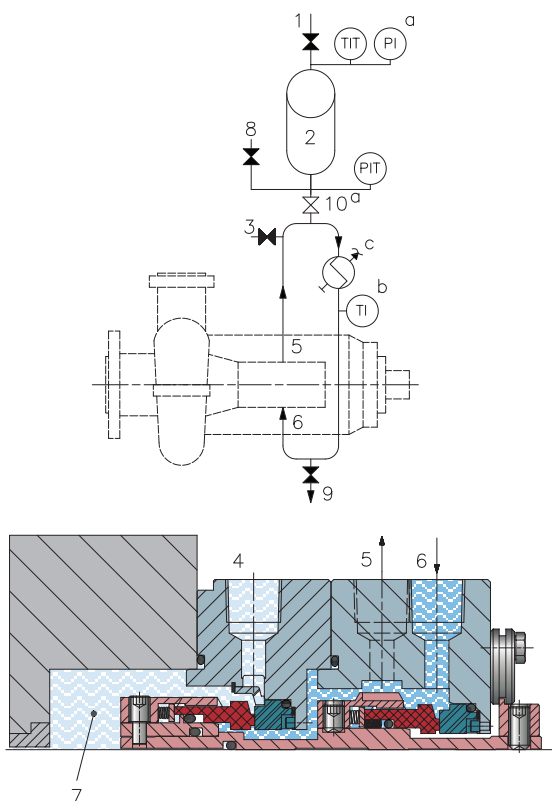
- Accumulator in painted carbon steel or AISI 316, for corrosive environments.
- Water or air heat exchanger (finned pipes or forced draft cooler).
- NBR, HNBR pr FKM.
- MAWP/MAWT depending on design conditions.
- Pressure switch instead of pressure transmitter available. This solution can be provided if accepted by the end user.

MAIN FUNCTIONS

- No emission of the process fluid to the atmosphere.
- Volume calculated to ensure that the time between refilling is in accordance with the API standard : 28 days
- Sized to remove heat generated by the seal faces through flushing fluid circulation, ensuring proper lubrication of the sealing surfaces: (see 8 liters).

CAUTION!

TIT mounted on accumulator is not mandatory in case a fixed alarm strategy (according to API 682) is selected. In case pumping ring cannot guarantee proper flow rate, external circulating pump must be considered. Fluiten can suggest the type of barrier fluid (see page 5-7).



- 1) Bladder accumulator charging connection
- 2) Bladder accumulator
- 3) Reintegrating barrier fluid
- 4) Flushing (F)
- 5) Barrier fluid outlet (LBO)
- 6) Barrier fluid inlet (LBI)
- 7) Stuffing box
- 8) Vent
- 9) Barrier liquid drainage
- 10) Valve (bladder accumulator integrity check)

PI) Pressure indicator

PIT) Pressure transmitter with display

TI) Thermometer

TIT) Thermometer with display