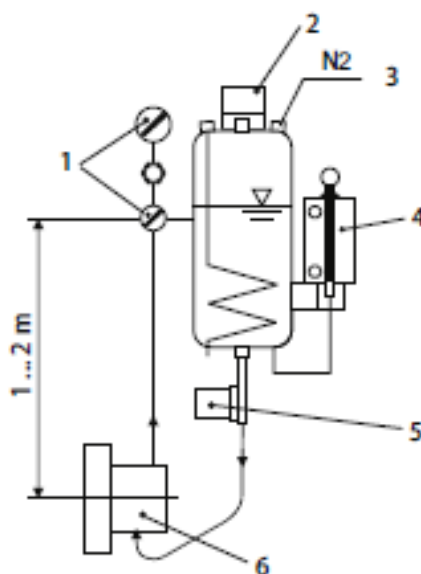
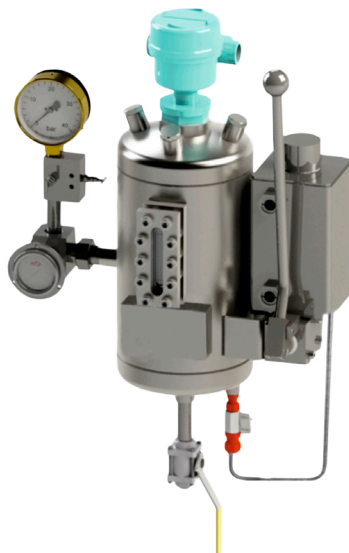
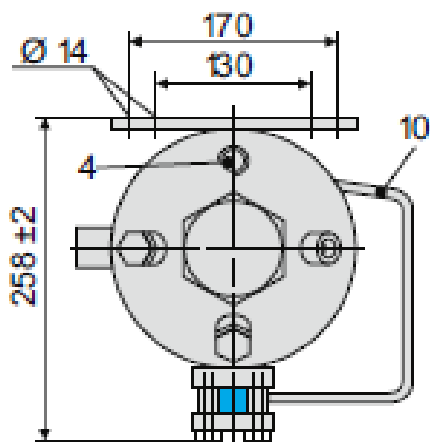
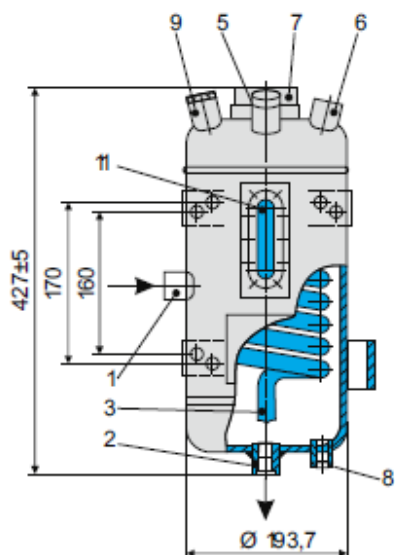


Installation, Details, Options



Description

- SBF2000 thermosiphon system makes it possible to supply buffer/barrier fluid to a double and a tandem mechanical seal for a broad range of applications. The range is available in different pressure levels with dished heads, sight-glass for level monitoring and with or without cooling coil.
- SBF vessels are equipped as standard with all the necessary system connections and brackets. The modular system allows the SBF 2000 vessels to be combined with a wide range of system components such as, level switch, circulation pump, hand refill pump, thermometer, base frame, etc. Circulation in accordance with API 682/ISO 21.

Technical Features

- Available with or without cooling coil. Cooling water connections at top (OUT) and bottom (IN): optimum draining and venting.
- Sockets with recessed gasket : no contamination of the circuit by thread sealant. Suitable for a wide range of demanding operating conditions: SBF 2000 up to 30 bar / 200°C. Vessel made of 316 stainless steel / borosilicate sight-glasses: suitable for universal applications.

Functional Description

The SBFS system performs all the basic functions of a buffer/barrier system for the operation of double seals:

- to pressurize the buffer chamber
- leakage compensation
- buffer/barrier fluid is circulated by thermosiphon effect or external circulation system
- to cool the seal
- to selectively absorb product leakage and prevent dry running (tandem arrangement)
- Use compressed air or nitrogen for pressurization.
- Circulation in accordance with API 682 / ISO 21 049: Plan 52, Plan 53A

Operating and Installation Schematic

The SBFS vessel must always be installed higher than the mechanical seal. The buffer/barrier fluid flows via the return pipe into the vessel and is cooled. The exchange of fluid takes place by the thermosiphon principle or by forced circulation, e.g. with a pumping screw. Connection pipes to the seal should be designed with as little resistance as possible.

- Measuring unit
- Level Switch
- From PCV, we recommend using a reverse controlled pressure control valve (PCV)
- Hand Refill Pump
- Circulating Pump
- Mechanical seal

Standards

PED 97/23 EC (Design and production in accordance with EU Pressure Equipment Directive) ASME VIII, Div. 1 (Design, calculation and production)

Industrial Applications

- Chemical industry
- Refining technology
- Oil and gas industry
- Petrochemical industry

Item

Description

- Buffer/barrier fluid IN (G1/2")
- Buffer/Barrier fluid OUT (G1/2")
- Cooling water IN (G1/2")
- Cooling water OUT (G1/2")
- Filling connection with plug (G1/2")
- Pressure gas connection (G1/2")
- Connection for level switch or level indicator (G2")
- Connection for refill unit (G1/8")
- Universal connection (G1/2" for safety valve, flare, etc.)
- Overflow G 1/8
- Overflow G 1/8

Technical Features

Designation	SBF2000
Pressure Equipment Directive	PDE
Integrated cooling coil	Yes
Volume, vessel (liters)	9
Volume, tube (liters)	0,5
Allowable pressure ¹⁾	30 bar (435 PSI)
Allowable temperature ¹⁾	-60 ... +200
Working volume, MAX-MIN (liters)	0.2
Cooling capacity without cooling water (kW) ²⁾	6

- 1) Higher values on request
2) Other materials on request